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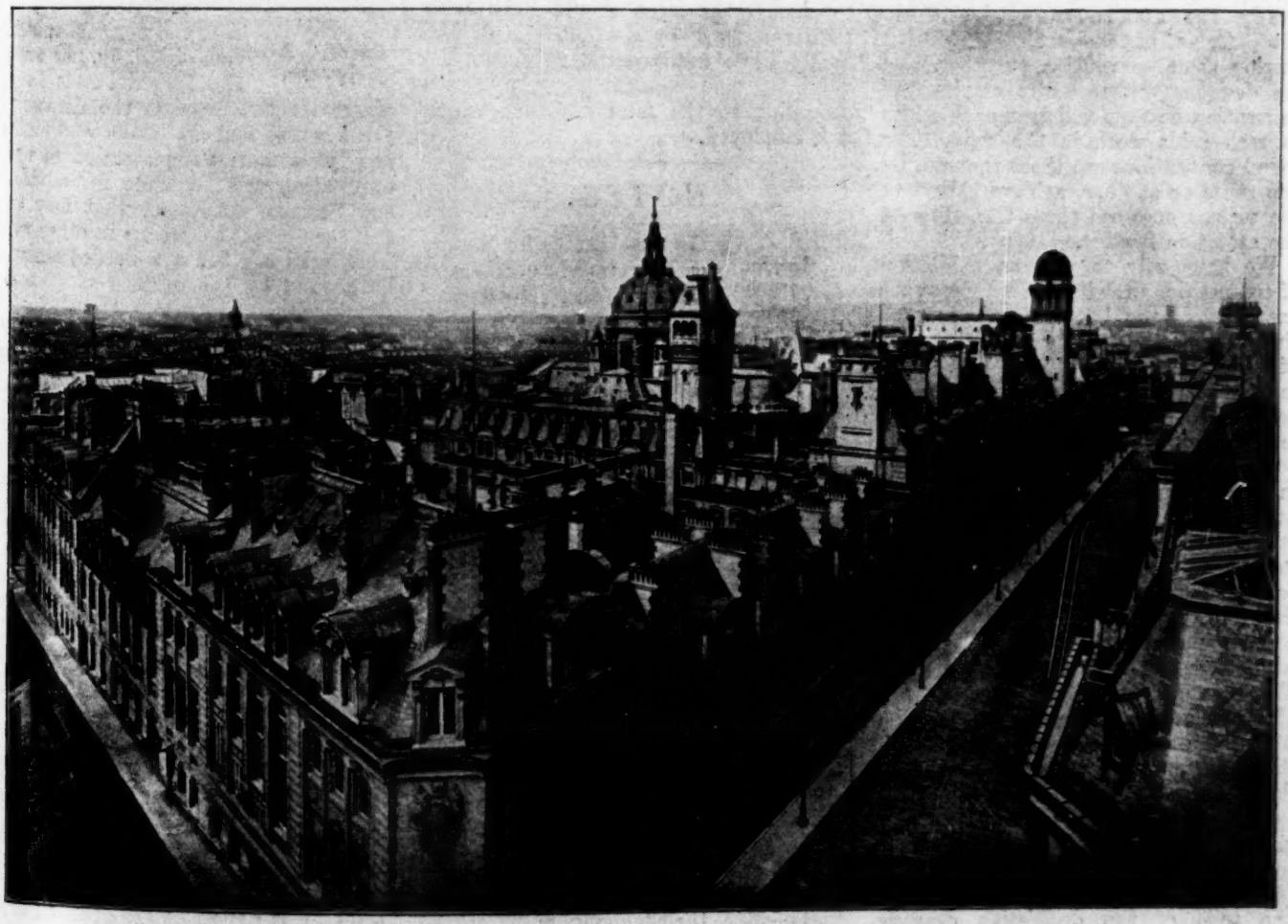

The Sorbonne, from the south-east.
H. P. Nénot, Architect.

ARCHITECTURAL DRAUGHTSMANSHIP.

THE discussion at the Architectural Association on Monday last reached a high level in dealing with a subject of the very greatest interest to all members of the architectural profession. To put it briefly, the point at issue was: Is it necessary for a good architect to be a good draughtsman?—a point that has often been raised before, but which has rarely been dealt with in the broad spirit that animated the speakers on this occasion.

The general view taken was that the better the architect could express himself in his drawings, the better would be his work, an axiom that would undoubtedly meet with general acceptance. But this hardly carries us far enough, there being

many methods of expression and many variations in the objects for which an architectural drawing is made. For example, the architect may put pencil to paper for his own information, to enable himself to realise the effect of what is in his mind. Again, it may be to give a lay client the power to realise the appearance of the completed work; or, again, to convey this information to another architect, who may be an assessor; while, lastly, there is the drawing to be handed to the workman for his guidance. In each of these cases the draughtsmanship may be different, while the same architect must inevitably vary his methods according to the dominating characteristics of the design as to which he is seeking to enlighten himself or others. It may be a question of massing, of light and shade, of colour, or of scale, all of which will naturally give a bias to the technique adopted; a method that would merit condemnation in one case might be eminently legitimate in another.

To consider another aspect of the question, one man may have strongly developed the faculty of visualisation, and to him a few lines will conjure up the whole effect at which he aims; another, not necessarily less imaginative, may require to have every detail on his drawing-board before he can picture clearly the appearance of his work. Most forms of architectural drawing employ some convention or other, and the designer will naturally employ the convention he feels will best enable him to realise his work in the solid. The sound conventions are those that do, by one route or another, achieve this end; the vicious ones are those that distract the attention from it.

We have only to visit an exhibition of competition drawings to see numerous examples of the latter class, examples that attract the eye at once on account of the attractive way in which the lines make a really charming pattern in black and white, a pattern which, if it were an end in itself, might be entitled to consideration as a work of art; the lines may take a pleasant relationship to each other, the decorative patterns indicating enrichment and carving may be pleasingly distributed on the paper, so as to secure balance in the distribution of dark on light, and we accept the design as something remarkably clever—until we endeavour to translate it into the solid. Then comes the *débacle*, and we find that the author, instead of designing a building, has been making a pleasing distribution of lines and masses on a double elephant sheet of paper. This, perhaps, is the most insidious form of skilled draughtsmanship. We have got over the petty tricks of flick and dash, but we can hardly claim to be out of the toils of the decorative drawing. There is only one way to walk with safety, and that is to refer insistently and continuously to the visualised solid that the drawings are to bring into existence, to see our work constantly in the air before us; the more alive the draughtsman to the beauties of line and decorative composition, the more necessary is this discipline.

The most important drawings are those the architect makes for himself; whatever these look like to the outsider, to their author they must indicate clearly what his building is to be, and thus enable him to realise his intentions. The working drawings are a simpler matter to the trained architect, as by the time his idea has taken its final shape the forms and detail are fairly definitely arrived at, and it is only needful that they shall be clearly and explicitly indicated to the builder. Of course, the fine draughtsman will probably do this better than the slipshod one, but it does not follow that the best draughtsman will make the most suitable drawings.

We feel that the strongest point made by Mr. G. Horsley in favour of fine draughtsmanship is its use in enabling a man quickly and accurately to place his ideas on paper, and thus to catch the fleeting thought as it passes. This is a distinct matter from the training that leads to the appreciation of fine forms and lines which may be divorced from actual skill in rendering them—a distinction that might have been more clearly brought out.

The discussion, in a way discussions have, showed a certain vagueness as to the purpose for which drawings might be made, one speaker thinking of the drawing in relation to the architect, another, in relation to the client, and so on. To arrive at a definite logical conclusion the issue should have been narrowed down or else subdivided, for, as we have endeavoured to show, the value of fine draughtsmanship varies according to the intention with which it is employed.

NOTES.

London Borough Mayors. In the elections for Mayors held on November 9 Mr. William Woodward, F.R.I.B.A., F.S.I., a member during many years of the Borough Council, was elected Mayor of Hampstead, and Mr. Horatio Porter, M.A.Cantab, A.R.I.B.A., formerly member of the St. Giles-in-the-Fields Board of Works, and, since 1890, a member of the Borough Council, was elected Mayor of Holborn. Mr. Sedgewick, an engineer, and the new Mayor of Poplar, is the representative of Stepney on the Metropolitan Water Board. Councillor A. Dawnay, the new Mayor of Wandsworth, is a civil engineer, and the principal of a firm in Battersea.

Middlesex County Arms. The coat-arms granted by the College of Heralds to the County, in terms of the Local Government Act (England and Wales) of 1888, was devised by Colonel Ottley Perry, F.S.A., J.P., and consists of a red shield charged with a Saxon crown in the chief point over three "seaxes"—the Saxon stabbing-knife—with their cutting edges turned upwards. The "seax" is the earlier form of the longer sword, or "scramasax." The crown, introduced as a "difference" from the East Saxon badge of the three knives, is modelled after that upon the silver penny of Athelstane (925-40), minted at Winchester, bearing the legend "*Rex Totius Britanniæ*." It is of simple shape, having a jewelled rim or band, from which rise four long points, drawn as three, carrying balls.

Mr. John Burns and Town Planning. Mr. John Burns again made some excellent observations on the subject of town planning when he laid the foundation-stone of the Bevington-street workmen's dwellings, Liverpool, and afterwards in his address to the School of Architecture. These echoes of his Guildhall speech were heard with much approval, especially as everyone present felt that the President of the Local Government Board had assisted so much in the practical realisation of Utopian theories for the improvement of the conditions of the poor. Liverpool, of course, did not wait for the Act by which Mr. Burns popularised the movement for municipal enterprise in dealing with insanitary and depressing areas; the Corporation has been at work for many years on similar schemes, and on the outskirts of the City the development of Port Sunlight by private foresight has been watched with an eye to emulation. Side by side with other architectural problems, Liverpool, in common with other great cities, is facing the difficulties which arise in sweeping away obsolete tenements and replacing them with houses fit for human habitation, and the presence of Mr. Burns, with his ever-ready personal reminiscences, gave the recent occasion the proper touch of sentiment.

Imperial Arts League. For the nominal subscription of 10s. 6d. per annum the Imperial Arts League places its resources at the disposal of those artists and art lovers who feel the need of a central organization to which application can be made for advice in any business emergency that may arise and for mutual assistance in other ways. That such a pillar was needed seems to be proved by the number of men and women who, as members, have helped to establish it or have sought its support. Among the architects are Sir Aston Webb, Sir Brumwell Thomas, Sir C. A. Nicholson, Mr. Leonard Stokes, Mr. Ernest George, Mr. R. Phené Spiers, Mr. A. N. Prentice, Mr. R. S. Lorimer, Mr. C. Harrison Townsend, Mr. A. T. Bolton, Mr. H. C. Corlette, and Mr. E. L. Lutyens. In the second Report of the League the case is cited of an architect member who, through the introduction of another member came into touch with a young painter, who successfully carried out a piece of decoration. Naturally, Mr. R. Anning Bell looks forward to the day when the office at 15, Great George-street, Westminster, will be a sort of Labour Bureau for artists and craftsmen.

The Payment of Quantity Surveyors. In the *Kentish Mercury* for November 11 appears a well-reasoned letter by Mr. Louis Jacob, F.S.I., A.R.I.B.A., on the question of the objectionable practice of some public bodies of asking quantity surveyors to tender for work. That the question is a burning one with representative quantity surveyors readers of the *Builder* must be well aware, but we question whether the extent and full character of the practice is properly understood, and such a statement of the case as presented by Mr. Jacob will do much to enlighten municipal bodies and others. What

should public bodies do? is the question asked, and in reply Mr. Jacob says:—

"What do they do when other appointments are made? Take a clerk of works; do they advertise to find out the man who will undertake the work for the lowest wage? No; they fix the proper and customary remuneration, and appoint the applicant who in all the circumstances is most suitable. The same is done in making the professional appointments to these public bodies, such as clerk, solicitor, engineer, surveyor, analyst, and librarian."

We often hear of surveyors offering to carry out work at ridiculous prices—prices at which a self-respecting and competent professional man ought not to take work or be allowed to take it by a public body. If the percentage is cut down so that a "living wage" cannot be got out of the work, how can a man be expected to give proper care and attention to his duties? If quantity surveyors were not, as a body, honourable men, the temptation to some to engage in questionable practices would seem a not unlikely result where work is taken at some of the low figures we have heard mentioned. The Quantity Surveyors' Association have taken a very strong view of the question, and we believe the Council of that body have gone so far as to remove the name of a member who offered to carry out work at an absurdly low price, and we think their action would be approved by most professional men.

State of the Building Trade.

REPORTS have reached us from various parts of the country which go to show that in spite of recent indications of improvement in trade the building industry is still in a depressed condition. This applies particularly to the North—Aberdeen and Edinburgh, for instance; and we believe the state of building in these towns is the same in many other centres. Trade all over the country has been anything but satisfactory during the last few years, and, unfortunately, while the building trade appears to be the first to suffer from the disinclination of the public to spend money on building, it is also one of the last to be affected by generally improved conditions. But in the history of trade we find the recurrent ebb and flow of prosperity, and there is ground for hope that the signs of returning national prosperity may quickly give new life to building.

Deserters from Architecture.

A CORRESPONDENT sends to *Notes and Queries* an interesting list of men who have taken up architecture as a profession but have abandoned it for other pursuits. For instance, Sir James Knowles, Aubrey Beardsley, John Fulleylove, R.I., Mr. Thomas Hardy, O.M. (once with Sir Arthur Blomfield), Mr. A. R. Wallace, O.M., Mr. Hall Caine, Mr. Leslie Ward, Mr. Frederick Harrison (once with Mr. Norman Shaw), Mr. T. M. Ellis, and Mr. Alexander Roche, R.S.A. It is one of the curious things in life that some people seem to be endowed with double and even triple qualifications, while others apparently have none. It is not education alone which gives a man a chance of success, for some of the most pathetic failures in life are scholars. Even architecture as a profession, however, should not be deserted until the aspirant to fame has found his *métier* in some other sphere of activity, for the "rolling stone" who gathers no moss is more common than the man who has contrived to walk in two paths.

PICTURE-GALLERIES.

WHAT amazing decorative distinction a few Reynolds give to a room! This courtly painter of courtly people, to whom he, in his ample manner, always, we may well believe, gave an added dignity, evolved from the fine composition and deep, rich colours which his eye first found, never again to lose, in the Italian masters. In the general turbulence and haste of modern artistic expression, in its hesitancy and nervous splash, what a relief it is to feel oneself in the presence of a painter who accepted tradition, who followed it in a spirit of urbane, intelligent culture, and who found in its principles, in its limitations even, his own extremely individual manner. We doubt that any great painter is afraid of the great tradition of his art; it is comprehensive enough, in all conscience, for the scope of the ability and imagination and manner of the most talented. A tradition in which to discover guiding principles, in which to find inspiration for the mind and hand, as Reynolds did; not to be used, as it has been before to-day, both in painting and architecture, as a sort of pattern-book from which to take details, as it were, *au choix*. Two pictures by Reynolds at Messrs. Agnew's Gallery must be included among his finest work. "The Hon. Miss Monckton," a graceful, upstanding figure (with a smile almost as elusive as that of La Gioconda), a picture expressing all the delight in the texture of materials, rich silks and spacious background of woodland, familiar in the Reynolds convention. "The Roffey Family," a group of five persons, formal enough in pose, is distinguished for the interpretation of the character of the older people, and its reappearance in their children, as well as its fine painting qualities. The gracious, classic spirit of Reynolds is in excellent company. There is Raeburn, with his Celtic sense of character: the somewhat superficial but always charming Lawrence; Romney, at times a little dull, and Hoppner, at times a little tasteless. We all know Turner's regard for classic myth, but in his "What You Will" he will appear to many in a new vein. Certainly it is a little strange to find him in harmony with a Lancret on the same wall, in harmony with the spirit of frivolous grace and elegance of the French school at the beginning of the XVIIIth century. The imposing, the tempestuous Turner, in a *bois doré*, a glade, with its urn, with the suspicion of a Pierrot peeping among the trees and other fantastic people threading the leafy avenues. A charming picture this, if not quite so gay in sentiment as the school to which it clearly belongs. His "Pas de Calais," a sea piece with the lighthouses of the city standing out faintly in the distance, is more characteristic. We do not know if the sea ever quite presents the aspect in which Turner painted it. It may be his "mental conception of the object" (of which we have heard something lately in other quarters). We can only say that these chromatic undulations, these hills and valleys of the waves, strike us as convincingly as the probably more faithful transcripts of Henry Moore or Napier Hemy. There is no space to speak of the Lancret, which the catalogue distinguishes as his masterpiece, or of one or two smooth Boningtons and Old Cromes, which do not here fall quite into place. But it is an exhibition that should not be missed.

From Messrs. Agnews to the Fine Art Society's Galleries is but a step: but the distance between the art of the past masters, of whom we have been speaking, and a modern master, Mr. Brangwyn, is considerable. Let us say at once that the present exhibition seems to us to do Mr. Brangwyn some injustice. The general effect of his work would have been much greater if there had been less of it. Piranesi did not draw on the scale of his Carceri etchings all the time, and one or two of them are ample decoration for a room. We mention Piranesi because in regarding Mr. Brangwyn's work the comparison is almost inevitable. These pictures represent Mr. Brangwyn in a somewhat boisterous mood. So much spacious design and boldness of execution leave one a little breathless. These noisy walls get on your nerves somewhat; they drown the still small voice of art. It is not easy, at any rate, to accommodate yourself immediately to the view of Mr. Brangwyn's spacious scale or to his imaginative outlook, which invests, perhaps sometimes indiscriminately, all that it portrays with pretty much the same forcible quality. We should fancy, for our part, that all objects and scenes have not the same value in this respect; that there is in this excess some want of balance, proportion, and poetic sensibility. We cannot, however, speak too highly of Mr. Brangwyn's power of design, significant drawing, and, here and there, subtle and effective colour. He is certainly a great decorator.

The Old Dudley Art Society provides a very pleasant, tentative sort of show of water-colours and other pictures. Many of them are of considerable quality, and they are all marked at prices which place the purchase of original and often charming work within the reach of the usual buyer of inexpensive reproductions. We hope that these artists' modest appraisement of their pictures will meet with the reward that it certainly deserves. Mr. W. S. Stacey, Mr. Pinhorn Wood, Mr. Paul Brinson, Miss Mary G. Simpson, Mr. Lawson Wood, Sir William Eden, Mr. Charles Dixon, Mr. John Hassall, and Mr. Trevor Haddon have all sent interesting work.

FINE DRAUGHTSMANSHIP AND FINE ARCHITECTURE.

AN ordinary general meeting of this Association was held on Monday at No. 18, Tufton-street, Westminster, S.W., Mr. Arthur Keen, President, in the chair.

Mr. L. Elkington (Hon. Secretary) having read the minutes of the last meeting, and Mr. E. Gunn (Hon. Secretary) the nominations, Mr. R. T. Inman (London) and Mr. P. J. Sainsbury (Highgate) were elected as members. Mr. Henry Budden, Sydney, N.S.W., was reinstated as a member.

Mr. Gunn announced that the next meeting of the Camera, Sketch, and Debate Club would be held on December 1 (ladies' night), when a paper by Miss L. A. Dunington, entitled "The Principles of Garden Design," will be read. He also announced that the Athletic Club Dance will take place at the Wharncliffe Rooms on December 15.

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The President proposed and it was agreed that a vote of thanks be accorded to Mr. Christopher W. Whall for presenting a copy of his book on "Stained Glass" to the library.

He also announced that the Annual Conversazione will be held at No. 18, Tufton-street on Wednesday, November 23, at 8 p.m. There will be an exhibition of drawings and sketches.

THAT FINE DRAUGHTSMANSHIP CONDUCES TO FINE ARCHITECTURE.

The President said that they were making a new departure that night in joining forces with the Camera and Debate Clubs, and the attendance seemed to show that the departure was a popular one. He would ask Mr. Gerald C. Horsley to read a paper, entitled "That Fine Draughtsmanship Conduces to Fine Architecture."

Mr. Horsley

said: "Mr. President and Gentlemen,—"It is foolish and insolent to imagine that the art which we ourselves practise is greater than any other, but it is wise to take care that in our hands it is as noble as we can make it."

I quote these lines from the "Stones of Venice," as they express something of the feeling I possess concerning the relation of fine draughtsmanship to fine architecture. That is to say, that as my business, as it is your business, is with the art of architecture, and, in Ruskin's words, "it is wise to take care that in our hands it is as noble as we can make it," we must agree that everything which contributes to the making of architecure should be of the very best. We must, I think, admit that drawing plays a large part nowadays in the producing of architecture, and that it is essential, if the architecture is to be good, that the drawing should be good also.

In short, if our architecture is to be noble, the means employed must be noble also, and one of the means undoubtedly is draughtsmanship.

Draughtsmanship a Means to an End.

We have, then, to regard draughtsmanship as a means to a noble end. Draughtsmanship will not by itself produce fine architecture, but if rightly applied it will contribute to its production. If architecture is the "Mistress Art"—and I am far from denying it—then "fine draughtsmanship" is one of her handmaidens, one of many who combine in duties which make possible the perfection of the Mistress Art herself.

The importance, indeed, of draughtsmanship may be realised when we remember that we are obliged nowadays, in the practice of our art, to make a very much larger number of drawings than was expected of the architect in past ages.

I can conceive it possible that someone here to-night will condemn this undoubted fact as a tyranny which we have no right to accept, and that he may implore this Association to use its influence to turn architects from the drawing board, and to drive them—as a friend once put it—"to the scaffold." But with what object? We shall agree that the architect should spend the requisite time in acquiring a working knowledge of the handicrafts in building. As a student he cannot for this purpose do better than spend some part of his time in a builder's yard, or as a clerk of works on a "job," but it is not necessary for him to spend his time when in practice in usurping the proper functions of the bricklayer, or the mason, or the builder's clerk in buying cement in the cheapest market. His real business is to be the master builder, and his chief function in that high office is to be a man of ideas. As Mr. John Belcher has pointed out, we can liken the functions of an architect to those exercised by the composer of music for the orchestra; the composer who combines and weaves into his composition the sound of many instruments, a man who in order to bring about the best result in his work has taken pains to become acquainted with the capabilities and the working of each instrument of the orchestra.

If, then, the architect is the master builder, the man of ideas, those ideas must be worked into terms of building, not on the scaffold, but at the drawing board. This implies the close apprenticeship to board and T square, which we all know, and to which we are faithful all our lives.

Draughtsmanship a Necessity of Our Time.

Draughtsmanship, therefore, rightly used, is a necessity of our time, and in the best interests of our art it should be as good as we can make it.

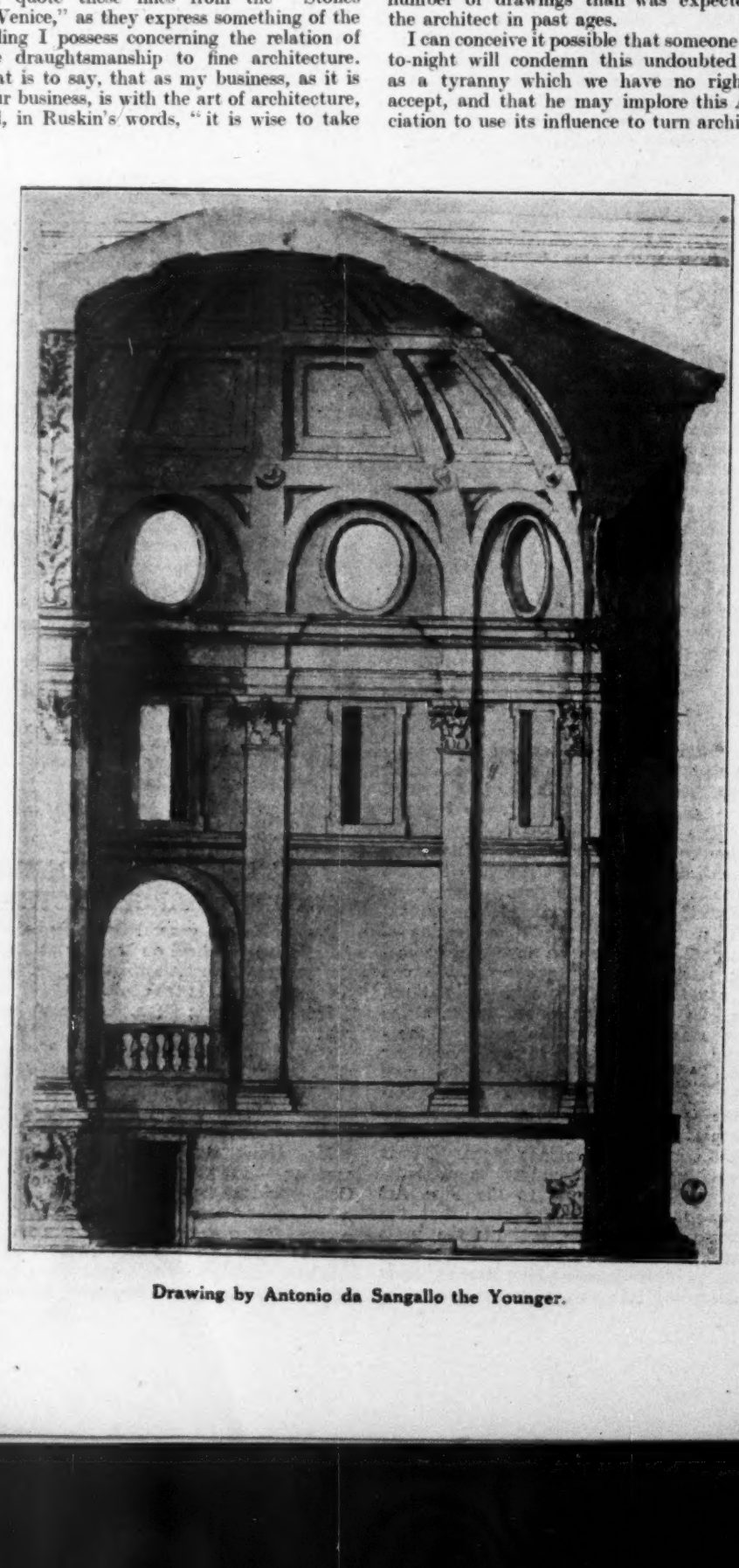
There are two reasons which especially warrant me in making this statement. The first, and the most important, is that skill in drawing, once it is really attained, becomes a living mental force to the artist, an added force to his mental equipment. You will perhaps realise how true this is when I say that a man who is a fine draughtsman will regard all objects within his view with a higher and a more just appreciation of their qualities than a man who is an indifferent draughtsman. The importance of any added mental force to the architect must be great when we remember that the processes of designing are mental, that the architect creates his design out of his knowledge and imaginings. He sees the plan of the house or the church, the scheme and "lay out" for the public building, spread out before him in his mind, each part thought out and mentally corrected before ever it is laid out in material form on paper.

If, in following out the latter process, he draws out the design cruelly, clumsily, hardly, and unsympathetically, the spirit will have fled from the thought; the bones and body of the scheme may certainly be there, but the soul will not, and to the spectator the project will be unattractive.

If, on the other hand, the architect had fulfilled his chief function of being a man of ideas, and has incorporated into his scheme just that touch of genius which may make him worthy of the title of architect, then if in drawing out his scheme the hand follows the brain in the transmission of the design to paper, and if the two work in sympathy, each touch of the pencil expressing as it were the very thought of the brain, then will the spectator rightly understand the end and aim of the artist.

Excellence in drawing, therefore, has an educative influence upon us, which, in our desire to train ourselves as capable artists, we cannot afford to neglect.

My second reason for the statement I have made can be more briefly put before you. It is nothing more or less than that history and past experience show that the best architects have generally been admirable and first-rate draughtsmen. This is a statement which can be amply substantiated; a consideration of these architects and their work in drawing will give the proof.



Drawing by Antonio da Sangallo the Younger.

Technical Qualities of Fine Draughtsmanship.

Thus, very inadequately I fear, I have put before you a general statement of the relation of fine draughtsmanship to fine architecture. In conclusion, I would like to refer to some of the technical qualities which the words "fine draughtsmanship" comprehend. I think we should give the words a wide interpretation. It is of the essence of good draughtsmanship to express character, and character in a drawing will out in different ways. We cannot drive draughtsmanship into too narrow a road and say, "This is draughtsmanship and no other." Yet a high standard we must have. Among others, we must apply the following tests:—(1) Is real skill shown in the drawing? (2) Is there beauty in the line? (3) Is the character of the building or the design clearly and ably expressed? If we have passed through the severities of the architectural mill ourselves, we should be able to answer these questions.

Permit me to quote once more Mr. Ruskin to you in this connexion. I make no apology, because, besides being an interesting draughtsman himself, he made a study of the whole question. He said, speaking of an artist, "it is in the perfection and precision of the instantaneous line that the claim to immortality is laid." The "perfection and precision of the instantaneous line"—does not that mean the sure and certain touch, the nervous line pregnant with character and restrained force? Again he says on this subject of the line—the work of the hand impelled by the brain—"the first merit of manipulation is that delicate and ceaseless expression of refined truth which is carried out to the last touch and shadow of a touch, and which makes every hair's-breadth of importance and every gradation full of meaning. It is not, properly speaking, execution, but it is the only source of difference between the execution of a commonplace and that of a perfect artist."

Manipulation.

This question of manipulation is thus of the utmost importance, and rests at the root of the matter. Our small-scale and detail drawings, to be alive with meaning and intention, must be perfectly expressed by the "perfection and precision of the instantaneous line," clean, firm, and sharp. Our full-size details must be drawn with even greater subtlety of expression than the small-scale drawings, the greatest care being necessary to express the spirit of the design in the contour of the mouldings. Let us remember that our working drawings are not only items of direction to the workmen under us; they are more than that; they should convey to their minds the very spirit and heart of our design. In the same way the sketches we make for our clients, to show the grouping of our designs, should not be mere diagrams; they should be drawn with intelligence and care, to create an interest in our purpose and an understanding of our aim.

In a masterly manipulation or execution we shall find truth, simplicity, and the mystery of inspiration. These qualities must all be present together in our completed drawings, particularly in our measured drawings and sketches, and in the drawings we should all make from the life.

Sketching and Drawing.

Experience proves that if we do not measure and do not sketch, we bid fair to be very poor architects. In this Association, with its splendid tradition and practice in sketching and measuring, it is not necessary to dilate upon the importance of either. We all know that the best way to study a building is to draw it, and that not till then shall we discover matters of detail which otherwise we should not have seen. As to the necessity for an architect to draw from the life, let me tell you what Sir William Richmond has said on this matter: "The artist who can delineate the beauty of the human form, who is scientifically conversant with its structure as a machine, is possessed of a power limitless as art itself. He can design a picture, make a statue, or build a cathedral. This is a startling assertion, but it has been proved over and over again to be a true one. The artist who is not possessed of this power is minus, I was going to say, everything."

We must at least agree with Sir William that the power of design in many an artist has been fostered, or created, if you will, by study in the life class. In no other school is it possible to learn more valuable lessons in the principles of proportion, or in developing the knowledge and appreciation of the close kinship which exists between the art of the architect and the art of the sculptor. The relationship between the qualities of fine sculpture and those of fine architecture is a subject apart, but so far as the study of this subject tends to the production of fine architecture, drawing from the life will worthily assist towards comprehending it.

Drawings as Diagrams.

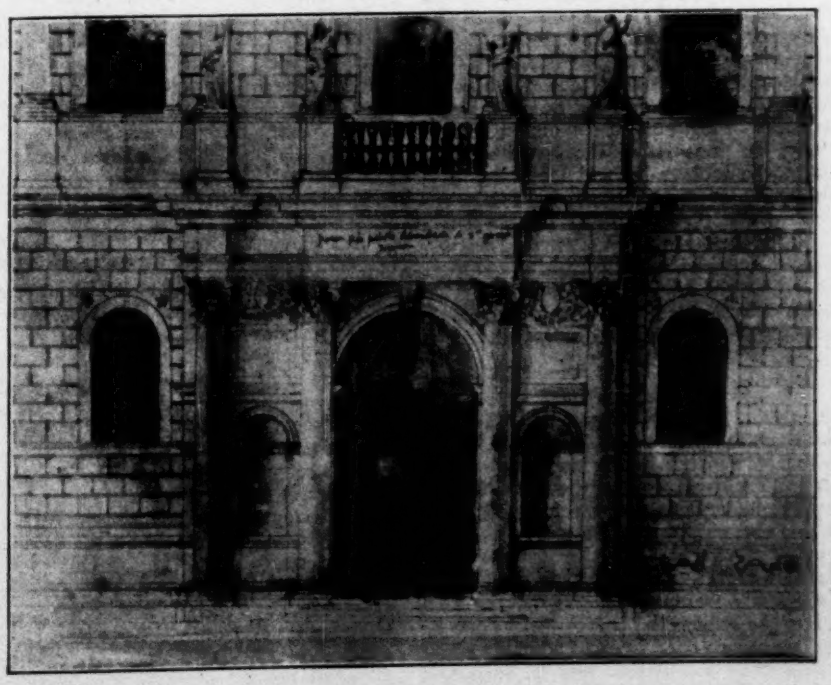
A few years ago, in trying no doubt to carry out some recommendations given in the first syllabus of the Board of Architectural Education, an attempt was made in some of our schools to decry the claims of fine draughtsmanship. Drawings, we were told at that time, were to be regarded almost wholly as diagrams, and by no means as instruments of pleasure, radiant with the beauty of draughtsmanship in its expression of the spirit of the design. Fortunately it was a movement which has not spread very far, but so far as it has gone I consider it mistaken, and that it has done harm, for it has led a proportion of our students to adopt a style of draughtsmanship which is hurried, scrappy, and unfinished, and consequently without either character or charm. The situation which was thus created is really an impossible one, and we are curiously reminded of the result of some old Puritan fulmination against any joy in work or life. It is wholly at variance with the teaching of the best artists of all time, who have one and all been at least consistent in insisting that an artist should take pleasure in his work, producing it "under the instinct and passion of an inner commanding spirit."

We may be grateful to our French friends for some change of view in this matter, for since the exhibition in London of the splendid drawings of Selinonte by Mons. Hulot we have heard less of this unfortunate attitude towards fine draughtsmanship, an attitude probably born of an unnecessary fear lest the student should give too much attention to the technique of his drawing, and neglect more important qualities in his design. If we carry out conscientiously the true association of brain and hand, we shall avoid, I think, the danger of allowing our facility in drawing—if we are so fortunate as to have any—to run away with us. Every accomplishment has its accompanying dangers and temptations, and to counteract these we must bring into play such sanity as we possess throughout the whole of our careers."

Mr. Ricardo said: "When my friend, Mr. Horsley, approached me on this subject and in a winningly suggestive way intimated that I might for the sake of discord and discussion adopt the position of "advocatus diaboli," I supposed that by "fine" draughtsmanship he would be alluding to that kind of drawing that has a tendency to be an end in itself, a tendency to construct a picture, not a workman's tool. But whilst he glances with an indulgent eye at this painter's ideal, he protects himself with so many sensible and unimpeachable safeguards to his—may I call it?—academic position that it's the devil (and not I) to know how to make any successful assault upon his eminence. To begin with—at the bottom we are agreed—an architect has got to express himself, and mainly by drawings, and therefore he must know how to draw, and how to draw with facility.

Education in Drawing.

The divergence, if there is any, comes when we attempt to define how far such education in drawing should be carried. To draw with facility means a long apprenticeship in a severe school of accurate notation which enables you to use your pencil or your pen as the final tentacle of your brain with the swiftness of thought. The pencil is but the extension of your fingers, which are but the prolongation of your arm, which is the channel through which the nerve movement comes from the brain, and the action of the pencil should be as automatic (in a sense) as the bat in the hand of the cricketer or the gun in the hand of the sportsman. Because, mind you, it's the placing of the cricket ball or the mortal wounding of the animal that is the real end. It doesn't matter if the bat handle is sprung or the blow came from the extreme end of it so long as the ball goes where you mean to place it, outside the boundary, so it doesn't matter whether



Drawing by Antonio da Sangallo the Younger.

you are using ball cartridge or powder and shot, or whether your powder is smokeless or cloudy, the hitting your mark is the real thing, and hitting it decisively. Consequently I demur to the quotation from Ruskin about "the instantaneous line" as not being apposite; his definition that "it is in the perfection and precision of the instantaneous line . . . that delicate and ceaseless expression of refined truth which is carried out to the last touch and shadow of a touch, and which makes every hair's breadth of importance, and every gradation full of meaning," applies to the case where the line is the end in itself. With the architect the building is the end, and his drawing is but one of the many tools requisite to achieve that end. "His real business," Mr. Horsley says, "is to be master builder, and his chief function in that high office is to be a man of ideas." Quite incontestable. But not, I think, what follows, "Those ideas must be worked into terms of building, not on the scaffold, but at the drawing-board." It depends a good deal on the construction we put upon the word "worked." Of course, a great deal of contriving and explanatory work must be done at the drawing-board, but the ideas (as Mr. Horsley has rightly said) are a brain concept, "thought out and mentally corrected before ever it is laid out in material form on paper." And the value of these ideas depend on the more or less perfect response they make to the conditions of life they have to answer, and to the qualities and limitations of the materials that have to be used. And for this the mind does not require draughtsmanship, but observation and memory. You think of the forms you are going to use, and you afterwards draw them out in order to convey to some one else what is in your mind; and also, since the matter is too complex and the external conditions too many to be carried accurately in the mind, there is a need for setting them out on paper and studying the different values of these conditions, and so finally reaching that delicate equilibrium that one calls a design. But all this while you are thinking in three dimensions, and the pencil is merely registering your thoughts as they take shape.

The Pencil's Function.

Directly the pencil begins to suggest or dictate the shape, it is usurpation, and disastrous usurpation, since the pencil's function is to be recorder only, not inspirter. As soon as the eye, and the mind behind it, begins to dwell on the decorative or artistic appearance of the lines put on paper it is beginning to drift off into side issues. Down this mistaken road stand the examples of picturesque buildings, and that sterile accumulation of "paper" architecture, that architecture that is corroded with considerations that appear only on paper, not in real life. I am not, of course, condoning slovenly or inaccurate draughtsmanship; it cannot be too careful and too exact, and I am ready to allow some slight idiosyncrasies in the practise of it, like as I am always touched by the beautiful rounding and considerate embellishment of the joiner's plane. One should be able to take a pride in one's drawing, and having turned out a thoroughly workmanlike affair, but it is not to be a picture.

Sketching a Diagram.

So, again, in sketching a diagram, to explain some piece of planning or construction to the workman one wants practised facility to show the essentials of the problem, and to put the ingredients of it in the clearest way. The art of choosing the point of view, and displaying just those parts and just those connexions which the builder really wants to know is not an easy one, and the answer to his difficulties must be seen first before ever it can be drawn; and one sees it as the artisan sees it, with tool and material in one's mind's hand, and one goes through the process of solving the problem in the way that one wishes him to follow, and the drawing should put this before him unmistakably clearly. Such diagrams as we find used by Professor Willis, Viollet le Duc, and Choisy are admirable illustrations of what I mean. In this way we may manage to convey to the workman's mind "the very spirit and heart of the design," and the more diagrams of this kind that we make the better. They clear the air, force us to dwell on the muscular anatomy and bones of our buildings, and so give them that physical structure that causes the finished surface to look, like a human being, sensitive and alive.

The joiner's plane, in a humble way, is a work of art; its shape is due to much practice, to much trial, to much affectionate handling, and the outcome is a beautiful tool. But its function is not to look well on the shelf or graceful upon the plank; the accurately smooth board is its justification, and the easier and the swifter it does its work the more its praise and the more its value to the joiner.

Sketches and Measured Drawings.

Sketches — besides constructing this facility of hand and teaching one what to represent as vital and what to omit as merely accessory—are an unrivalled means of imprinting on one's memory such architectural composition as may have interested us; no photograph has the same power, nor the same personal selection; but I am inclined to advocate that soon after the sketch has been made it should be destroyed; its work is done; if it hasn't made the lasting impression that was expected, the reasons for its failure are sufficiently adequate. About measured drawings it is quite a different matter. These should be made, not for oneself only, although the analytical knowledge of construction obtained in making them is a splendid education, but also as adding to the general stock of trustworthy records concerning things that can never be replaced and are surely getting destroyed. The devotion necessary to sympathetically portray the subject chosen gets a kind of sanctification when you reflect that you are working also on behalf of all lovers of architecture, of art, and of history, that by your careful delineation you are constructing a simply invaluable record, accessible to all students, and it may be eventually the one trace left of all that you have thought so charming. And with this aim before you, this ideal of portrayal, the hand will be always holding the pencil in check; it is easier to be suggestive than to be downright, yet it is one's charge to mark down mere matter of fact rather than what one might fancy may have been the intentions of the builders. The very limitations and imperfections, other than those resulting from the ravages of time, weather, and mans' destructiveness, the unabashed contrivances, are all so much history, the key to which is in the stones themselves. Nay, history itself, without these monuments as exponents, can only be imperfectly read and understood.

The Best Architects as Draughtsmen.

Mr. Horsley affirms "that history and past experience show that the best architects have generally been admirable and first-rate draughtsmen." Well, statistics on this head are idle, and Mr. Horsley very prudently shelters himself behind an inserted "generally" in his pronouncement. We must consult our own experience and our own retrospect of history. In England the architect is not discernible as such until the days of Inigo Jones, and there are no scraps of his handiwork to enable us to form an opinion as to his draughtsmanship. Such architectural studies as can be examined of Leonardo da Vinci, Michelangelo, and Sir Christopher Wren might have been drawn by anybody—me, in fact. The two former were, of course, unrivalled in their powers of draughtsmanship, but they didn't spend it conspicuously on their architectural drawings; it is noticeable in Michelangelo's and Raphael's case what a lot of shorthand, so to speak, they used; they couldn't spare the time to indicate more than the three divisions of the entablature, for example, or the mere bell and abacus of the cap, that was to be floridly composite when carved. Coming to my own time, I may say that the two masters to whom I was successively apprenticed were neither of them "fine draughtsmen" in the usual sense of the word, though they had draughtsmanship enough to make their intentions perfectly intelligible; and the most individual and romantic architect of our time, Mr. Butterfield, was, to judge by his note-books, no great hand as a draughtsman, and worked, so far as his working drawings were concerned, through other men's fingers. That one's drawings should give us pleasure in the working is no more than right; done *con amore* they will probably be more explanatory than those regarded as so much taskwork, and in these days of photographic reproductions, facsimiles, not copies, of the originals reach the workmen's hands. One likes to see a clean, tidy, straightforward drawing, free from affectation and easily legible, just as one likes to see the big jack-plane in the carpenter's hands, but there may be many opinions as to how tidiness, legibility, and straightforwardness should show itself, and to some extent in these chaotic days each individual must be something of a law unto himself. We might, I think, with advantage extend some of the canons of conventional representation and by building up a tradition on some accepted uniformity, as, for instance, in colouring, so making our drawings more universally and more quickly intelligible; but this consideration takes me away from my imposed function, which was to be the "advocatus diaboli," and if in this I have been at all successful, why, then the devil's in it."

Mr. Ernest Newton contributed some observations, which were read by the President.

Mr. Newton said that, though agreeing in the main with all that Mr. Horsley said as to the merit of clear, accurate draughtsmanship, he thought that the great value of fine drawing was as training to the eye and the mind. To many students in their early days architecture was rather a dry study of brick bond and beams and girders, with occasional excursions into the higher regions of the "Orders." They had a vague feeling that some day they would know how to do everything, but they were altogether indefinite as to how this knowledge was to come, how and when they would have the power of selection, discrimination, and criticism. Careful and systematic drawing would be a sheet anchor to them. The growing sense of mastery of a difficult art would give them confidence, while at the same time developing powers of discrimination and criticism which would be invaluable later on. Careful sketching of old buildings would be a delight instead of a task, and the road to efficiency would be made shorter and infinitely pleasanter. Slovenly draughtsmanship generally went with slovenly thinking. Of course, there was always the danger that a good draughtsman would fall in love with his drawing, that he would forget that he was designing a building and not making a picture; but one or two little lapses of this kind would be enough to cure him of this bad habit, after the building had been constructed, and with this danger guarded against it might, he thought, be accepted as true that anyone making a beautiful drawing of a building he was designing would take so much pleasure in it that his mind would act in harmony with his hand. There was no rule without its exception, and it was quite possible, indeed we knew it was the case, that the very efforts which an inexpert draughtsman had to make to put his ideas on paper led him

to concentrate so much on the building he had in his mind that, in spite of the handicap of weak draughtsmanship, his buildings would not be inferior to those of his more expert brethren. The untrained draughtsman was like a one-armed golfer. We often heard of these one-armed men making wonderful scores, but that was no reason why we should cut off one of our own arms; most men could play better with two! Again, an architect who was a well-trained draughtsman had an inexhaustible capital, and would go about the world with the quiet confidence of the man who in other walks of life counted as his great asset a large balance at his bank.

Mr. C. S. Spooner
said he differed from Sir William Richmond in the statement quoted by Mr. Horsley as to drawing from the figure; he thought they went too far. Many modern painters could draw the figure as well, he supposed, as it could be drawn, but, judging from their exhibited works, many could hardly design a picture. Other qualities were required, *i.e.*, imagination having something to say, fancy, and a sense of colour which nowadays was rare. Again, with modern sculptors their skill in modelling from the life was astonishing; they knew all about the anatomy of the figure, but could one compare the work of any living sculptor with the work of, say, the XIIIth-century sculptors at Amiens? And yet those XIIIth-century men would be far behind in modelling from the life; how one was to design a cathedral from the skill and knowledge gained in drawing the figure he did not understand. But drawing from the figure was the best training an artist could have, whether he be painter, sculptor, or architect. As to what Mr. Horsley said, much depended on what was meant by "fine drawing," he had given a valuable hint when he said it was of the essence of fine drawing to express character—by means of beautiful workmanship, he (Mr. Spooner) would add. That seemed to sum up the whole matter. Great facility in drawing was rather a danger, and often led to bad drawing, *i.e.*, mannerisms, etc. Good draughtsmanship—expressive and beautiful draughtsmanship—meant brain work, which was difficult. The business side of their calling was ever warring against them as artists, but draw they must, and the better they drew the greater chance there was of their ideas being realised by those with whom they had to work and so translated into material.

Mr. C. F. A. Voysey
said it was difficult to see the logic in the statement that fine draughtsmanship conduces to fine architecture, if we believed that fine draughtsmanship was only the manifestation of qualities existing in the draughtsman. Like hand-writing, which denotes certain characterisitic qualities, so does draughtsmanship denote personal character. Trying to write clearly and distinctly was a consequence of the desire to be clearly understood. We couldn't then say that clear writing makes us frank. Trying to be frank, direct, and truthful must improve our drawing and our architecture too. Firm deliberation and care would lead us to end our lines at definite points in a broad and emphatic manner. Whereas the absence of care and deliberation and desire for haste and indecision would lead to the lines fainting away at their terminals. The trick of drawing lines further on than required was to him a sign of haste and slovenliness, and betrayed an absence of that clear deliberation which leads us in speech and writing to use no more words than are necessary to make our meaning clear. Obviously, the habit of mind that would control the superfluous and unnecessary was to the architect a very precious quality; and he might surely exercise this quality in his drawing as well as in his design, and keep it in healthy activity, and in that way improve his architecture. All art is the expression or manifestation of human thought and feeling. And all human thought and feeling was affected by the character. So we find the moral sense has more effect on our writing and drawing than all the copy-books and architectural schools put together. In a certain measure character could be developed or modified by certain mechanical exercises. We find the engineer's training affects the engineer's outlook. We observe life through the spectacles tinted by our habitual frame of mind. If we are engaged on the minute examination of minor details we are apt to miss the broad views of far-reaching phenomena. We should not expect the steel-plate engraver to appreciate fully the methods of the scene-painter. We have all noticed how very like in outward appearance graphic artists are to their work, and he thought the same likeness was to be observed between the architect and his drawings. The habit of mind was the main factor in affecting our drawing, and it was surely more profitable to purify the main springs of action than hope to dilute the poisons that may be therein. Drawing, then, to his mind, might be improved in order to dilute the bad taste of the draughtsman, but it would only do a very little for us.

Mr. S. Hamp,
Chairman of the Debating Society of the Association, said it was very important for the architect to be a good draughtsman, *i.e.*, that he should be able to express himself in a reasonable and workmanlike way. Mr. Horsley encouraged them as students to learn to draw accurately and with character, and to give expression to their thoughts in an artistic way. For an architectural student it was a great help to be taught to draw well, apart from his work in after life. If one were studying abroad one derived far more from their studies by having the knowledge and power to express on paper the things one saw. He did not go so far as to say that good architecture could only be produced by fine draughtsmanship, nor did Mr. Horsley, but the architecture of the man with the power and knowledge of fine, clear, draughtsmanship would, he thought, be finer than it would be if he lacked that power.

Mr. T. L. Dale
said that to say that fine draughtsmanship conduced to fine architecture was like saying that fine penmanship conduced to fine literature. The idea was the whole point, and if one could put down an idea so that it was clear to the workman, that was all they had to do. He was inclined to think that draughtsmanship was a very great danger, and that it was the last thing to be urged on the students of the Association. In looking at some of the beautiful drawings produced one could not help wondering what they would look like if executed; they would often be a great disappointment to their authors. The value of fine draughtsmanship was to "spoof" one's clients, and so far it did conduce to fine architecture. History was against Mr. Horsley's contention. The great architecture of the past, as far as one could find out, had been produced with the minimum of drawing and certainly with no "fine draughtsmanship."

Mr. A. G. R. Mackenzie
said that fine draughtsmanship did not lead to fine architecture. The only thing necessary in draughtsmanship was accuracy in drawing and in showing shadows, and that was very much neglected nowadays. Apart from that, it was often a snare, and if a man was a good designer and knew modelling and construction he was bound to be good enough draughtsman to be able to make good buildings.

Mr. H. A. Hall
said that if a man had something to say he probably said it to the best of his ability by drawing as well as he could. The secret of all interesting drawings was whether they had anything to say or not. There was another point. A very distinguished architect, after looking at a plan that was brought to him, said, Why don't you work on it with charcoal for three months? What was meant was that there was an amount of modelling and working of preliminary ideas to be gone through that would really be hampered by fine draughtsmanship, which could come in later on, when once the ideas were worked out. But he did not think one could start with fine draughtsmanship. One had to model and draw roughly, so to speak, judging the result as a modelled building, as a cubic, concrete thing, and he should like to hear the opinion of others as to where that state of drawing leaves off and what was called fine draughtsmanship began—where the workmanlike stage ends and the beautiful drawing stage commenced and which played the greater part in the production of fine architecture.

Mr. W. Curtis Green
said drawing to an architect was wholly a means to an end, and it was of great value to students, because it stimulated their enthusiasm. A student comes to the enthusiasm for design in bricks and stone through a series of processes of which drawing is one. Another important phase of the subject was surely the effect on the workman. If one sent out carelessly-executed drawings to a joiner's shop—or working drawings not as carefully prepared as one could do them—it must react on the workman; if he saw a thing beautifully drawn it must affect him in doing the work; if it were not carefully drawn the work would suffer. "Fine architecture" was a difficult thing to define, and there must be different kinds of drawing to reach the given end. There were, for instance, the fine drawings that must have been prepared for the front of the new British Museum—shaded drawings probably; refinement like that could only be got by academic drawing. But, on the other hand, there were such drawings as Professor Lethaby would prepare for his church in Gloucestershire; French academic drawing could not express that kind of architecture. A clever draughtsman said to him some time ago that the reason why Gothic architecture was not popular at the present time was because it was so difficult to draw.

Mr. J. D. Crace
said something might be said about experience as the result of drawings. We had still existing a great number of Wren's designs which perfectly expressed his intentions, but none of which would, he thought, pass muster in an ordinary competition, and yet we had Wren's buildings, from which it was clear that the drawings sufficed to produce what are now regarded as the finest architecture that we have in London. Again, in no competition in modern times were more beautiful drawings produced, he supposed, than for the new Admiralty buildings, but if those buildings were put in the same scale with Wren's buildings they would not, he thought, maintain their reputation. Fine drawing, which was an excellent thing, gave a man great pleasure, and no doubt often helped him with his clients, but he did not think the proposition that fine draughtsmanship conduced to fine architecture would hold water. The draughtsmanship of the past was inferior, but the architecture superior to that of the present day.

Mr. J. H. Markham having spoken,

Mr. H. Coe
said the buildings of Greece, Egypt, Byzantium, etc., were not carried out by one man. We had become paper architects to a large extent, instead of men who could control the work of other men; it was only by co-operation that we could get the best results. The engineer had taken a lot of work from architects, and he often produced æsthetic buildings. If architects did not keep abreast with construction their draughtsmanship would be nil. For all that, draughtsmanship was of the greatest value to an architect,

as that enabled him to see things as they are and how they are designed.

Mr. Theodore Fyfe
said that Mr. Horsley had given a splendid paper, but that Mr. Ricardo made the best case. Mr. Horsley came nearest to the essence of the subject when he spoke about the fine diagram, for he (the speaker) thought we ought to go back to the fine diagram. Drawings of old masters showed fine work in line full of that character which Mr. Horsley said all fine drawings should have. Such drawings were a means to an end: they were fine diagram drawings in which everything was properly shown. And he thought we could and should have such drawings now. If one looked at the drawings of the great masters of the past—Bramante, for instance—one saw drawings which showed the living form of the design, and yet they were diagrams. The subject could hardly be voted on as it was put, though it could be put that fine draughtsmanship conduced to the *appreciation* of fine architecture. Mr. Mackenzie's point as to accuracy was a good one, and so was what Mr. Hall said about working on drawings, though the eminent architect he mentioned would probably admit that from the charcoal drawing one worked to the fine drawing. Mr. Green's point as to the different kinds of building touched the very essence of the subject. They could not imagine Professor Lethaby's church drawn out in fine shaded drawings, but they were very valuable as done. If one admitted "shirt-front" architecture one must admit academic drawing of it.

Mr. Voysey
said it was very much a matter of temperament and method how a man went to work on his drawings. He should like to see fewer sketches and more complete thought. If they had their idea complete in their mind they could draw it without spoiling such a lot of paper.

Mr. G. L. Elkington
said that, apart from its educational value, he thought that draughtsmanship to the architect was of dual service. The first was that it acted as a sort of crucible in which the ideas, with which the mind of the designer should be saturated, could be crystallised into gems. This draughtsmanship should be ready, apt, and correct, but it need not be fine in the ordinary sense. Gems always deserved a fine setting, and whilst a great deal rested with the temperament of the draughtsman, here was the opportunity of fine draughtsmanship as defined by Mr. Horsley.

Mr. G. E. Nield and Mr. D. A. Forster having spoken,

The President
said they had wandered from the question. They had heard about architecture and architects of past ages, but they had nothing to do with the matter. Michelangelo, for instance, who *was* a fine draughtsman, by the way, though they did not know whether his fine draughtsmanship conduced to his fine architecture, though very likely it did. They had wandered again as to working drawings. The architect had two functions—he had to design buildings and get them carried out. Assuming that he had designed a building, all that he required after that was the capacity to express his intentions clearly on paper for the guidance of the workman. But he had first of all to get it on paper, and at that stage of the proceedings fine draughtsmanship must be of the greatest possible advantage to him. A fine drawing, apart from its purpose, was a work of art in itself. It possessed many qualities—beauty of line and colour, studied balance of light and shade, etc., which were also qualities of fine architecture. In producing these qualities on paper a man would be thinking how they could be worked out in brick and stone, and from that point of view fine drawing conduced to fine architectural results. When Mr. Ricardo spoke of the wonders of the XIIIth-century architecture, produced without the aid of fine draughtsmanship, he (the speaker) thought of Philip Webb's work—modern work of great ability, nearer in character to the work of mediæval times than that of anyone he knew. Webb was a superb draughtsman, and his facility was remarkable, and he (the speaker) did not think that Webb would have got his work carried out unless he had been a fine draughtsman. That seemed a good illustration to put forward that fine draughtsmanship conduced to fine architecture.

Mr. Horsley,
in reply, said he endeavoured to make it clear that draughtsmanship played but a humble part in an architect's work, but to say that the object of fine draughtsmanship was to "spoof" one's clients was absurd. As to Mr. Crace's references to certain drawings, who made those drawings? Perhaps the gentleman who made the drawings could have made a fine design if he had had the chance. He wanted to remind them of the names of a few architects who were fine draughtsmen. They were:—

Villard de Honnecourt.

The authors of the design for the west towers and spires of Cologne Cathedral (made in the XIVth or XVth century); these drawings, on vellum, are exhibited at Cologne.

Many architects of the XVIth and XVIIth centuries in Italy, notably Michelangelo, Antonio da Sangallo, Bramante, Palladio (many of whose original drawings can be seen at the Library of the Royal Institute of British Architects), Vignola.

In England in the XVIIth century—Inigo Jones and Sir Christopher Wren (the drawing by the latter of his design for the dome at Greenwich was admirable, and might be compared with a modern measured drawing of the dome made a few years ago).

In the XVIIIth century in Rome lived and drew Piranesi. The "carceri" drawings of this very remarkable artist, representing his ideas of prison architecture, had clearly a very sensible influence upon George Dance the younger, the designer of our own Newgate Prison, as Professor Blomfield had ably shown in an article on the evolution of the Newgate design. George Dance, jun., was impressed to some purpose by these extraordinarily vivid and imaginative drawings, as all who remembered the fine architectural qualities of Newgate Prison would admit.

Nearer our own times in the last century we had Elmes, the designer of the St. George's Hall at Liverpool (a sketch of the Hall which he had seen was quite masterly). Cockerell, some of whose drawings were at the present time hanging on the walls of the Royal Institute of British Architects in Conduit-street. George Edmund Street, who had a fine command of the drawing pen, with a character and touch all his own; and, finally, W. Eden Nesfield and R. Norman Shaw, R.A.

There was yet another world of fine drawing which had led to the creation of fine architecture. This was the realm of architectural sketching and measuring. Of the masses of sketches which had been made, only those which were drawn with intelligence, so that they were really drawn not only on the sketch block of the artist, but also on his mind, were of value as means of education, not for mere copying and reproduction. Villard de Honnecourt was no doubt a good craftsman. His sketch book, which was the earliest European architectural sketch book he knew, certainly suggested that De Honnecourt would profit by his good drawing. In our own times three of our ablest and most distinguished architects were our leading architectural sketchers and measurers. He meant William Burges, W. Eden Nesfield, and Mr. Norman Shaw. Some sketch books and measured studies of supreme interest and execution by the two former may be seen in the Library of the Royal Institute of British Architects, while several of them would have seen and would know the wonderful quality of the sketches by Mr. Shaw. What was characteristic and noticeable about all the drawings by the masters he had enumerated was the great delicacy and care, and at the same time the great vigour, which appeared in the line. Further, the perfectly accurate representation of the proportions and "scale" of the object drawn; of the outline and projection of cornices or mouldings. It was not only what these men drew which influenced the work of their lives, but it was also the intelligent and the beautiful way in which they drew.

Mr. Horsley then mentioned the following names of some fine French draughtsmen, *i.e.*, Charles Garnier, Leon Ginain, H. Daumet, Jean Pascal, E. Bénard (who was building the Californian University), Redon, and Chedanne. They were all Grand Prix men.

Mr. Ricardo also briefly replied and said, as to sketches being destroyed, he never made one in his life. Sketch-books had a disastrous effect on one, but measured drawings were invaluable.

The President then put the question, with the result that twenty-eight voted in favour of the proposition and thirty-one against.

The meeting then terminated.

LAW REPORTS.

KING'S BENCH DIVISIONAL COURT.
(Before the LORD CHIEF JUSTICE and Justices PICKFORD and COLERIDGE.)

Case Under the London Building Act.
London County Council *v.* The Cannon Brewery Company, Ltd.

THIS case came before the Court last week upon the appeal of the London County Council from a decision of the stipendiary at the Clerkenwell Police-court dismissing a summons taken out by the Council against the brewery company for not having provided means of access to the roof of the Rising Sun, Euston-road, in the event of fire.

It was argued before the magistrate on behalf of the Council that the building in question came within sect. 12 of the London Building Act Amendment Act, 1905; that it was a building having more than two stories above ground and exceeding 30 ft. in height. It was also contended that the premises were not a dwelling-house occupied as such by not more than two families, and for that reason means of escape by the roof should be provided.

For the defence photographs were produced showing that the premises had no projecting front. It was contended that the premises, which were used for both residential and business purposes, did not come within the meaning of the Act, and that, having regard to the fact that there were less than twenty persons resident therein, the Council had no power to insist upon the provision of ascent to the roof.

The magistrate held that the premises were a dwelling-house, that less than twenty persons resided on the premises, and that it had not a projecting front within the meaning of sect. 10. He therefore dismissed the summons, awarding the defendants 10*l.* 10s. costs. Hence the present appeal of the London County Council.

At the conclusion of the arguments of counsel their Lordships held that the case turned largely upon a question of fact, affirmed the decision of the magistrate, and dismissed the appeal with costs.

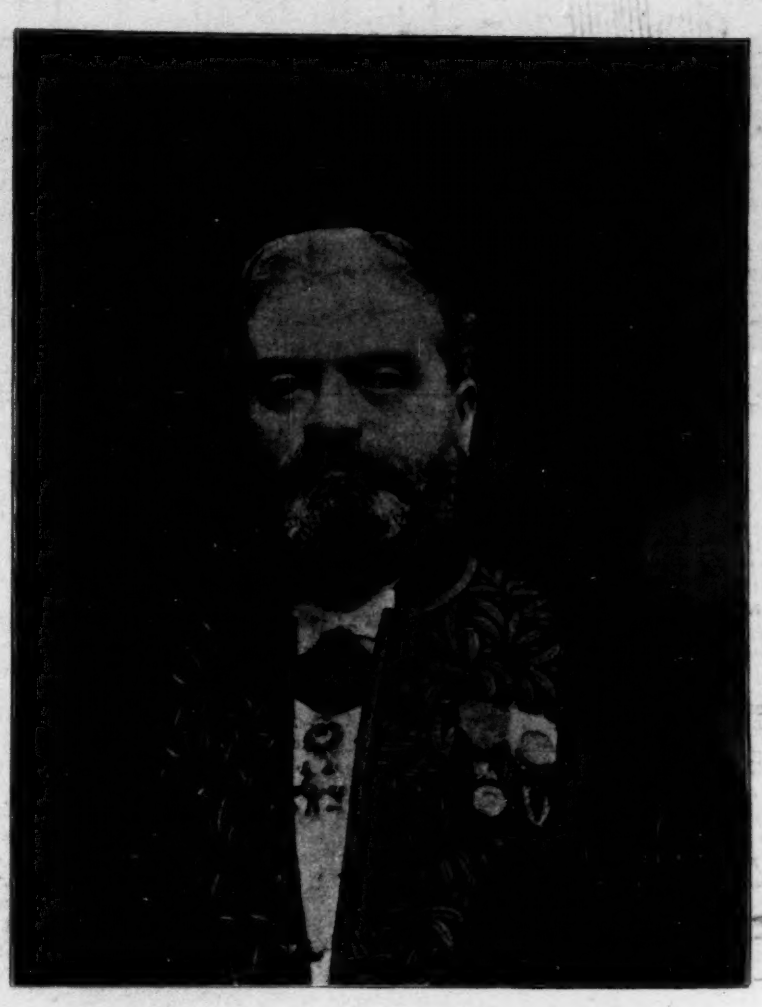
THE JOYCE GREEN HOSPITAL, DARTFORD.—In the obituary notice in our issue of the 5th inst. it is stated that Messrs. Treadwell & Martin were the architects of the Joyce Green Hospital, Dartford. We are informed, however, that this hospital (probably the largest of its kind) was the work of the late firm of Messrs. A. & C. Hurston.

CONTEMPORARY ARCHITECTS AND THEIR WORK:

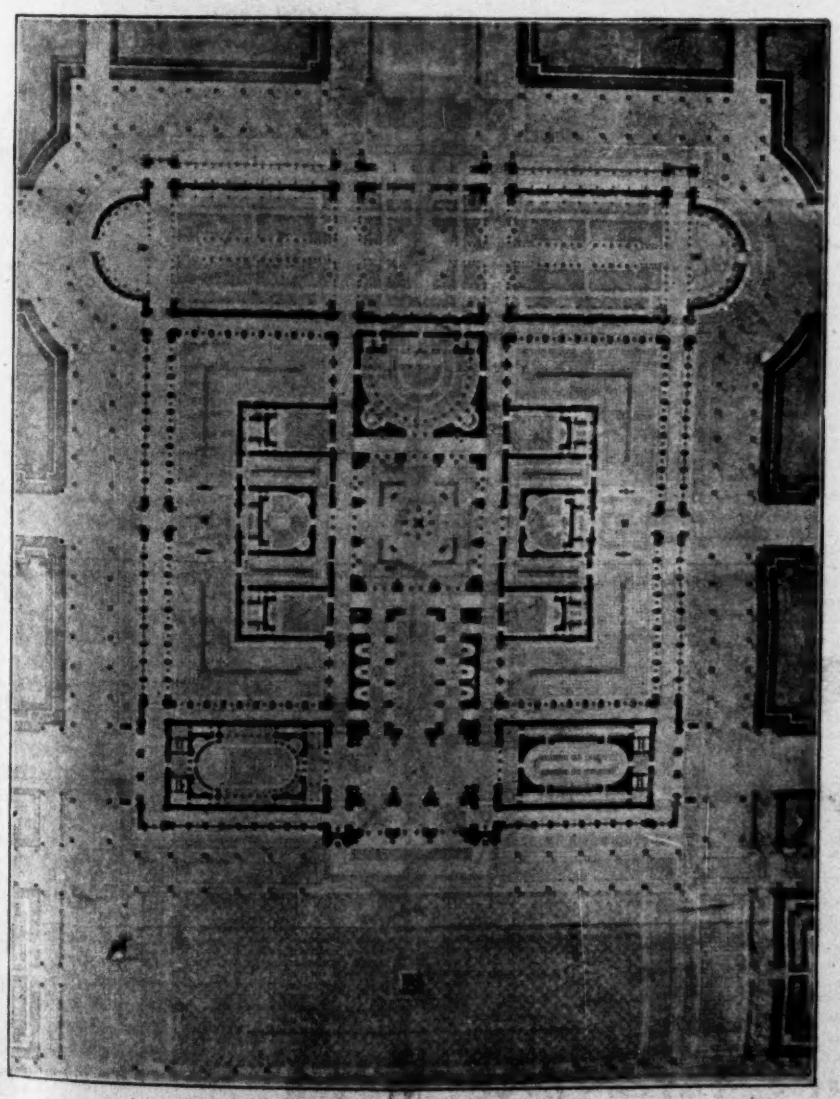
HENRI PAUL NÉNOT, MEMBER OF THE INSTITUTE OF FRANCE.

M. NÉNOT, one of the youngest of the members of the Académie des Beaux-Arts of the Institute of France, author of several of the finest modern buildings in France, and an eminent leader in the art and in the profession of architecture in his own country, has had a meteoric career. He was born in the Cour des Miracles, Paris, May 27, 1853. His father, Joseph Nénot, was a maker of artificial fruit.

In order that he might receive a complete education young Nénot was sent by his father to a public boarding-school at Villiers-le-Bel in 1862, where, at the age of nine years, he immediately displayed certain aptitudes and repugnances. He disliked Latin, but became greatly interested in the sciences and fine arts, especially in architecture. To amuse himself soon after entering the school he measured and drew a complete and exact plan of the establishment. As neither the elder Nénot nor the schoolmaster desired to prevent the youngster from taking up a vocation for which he appeared to have a pronounced preference, he was placed at the age of thirteen in the atelier of M. Lequeux, architect of the Department of the Seine, who had never before accepted a pupil so young, and who kept him in his own office, below which was his atelier. When only fifteen years of age Nénot entered the Ecole des Beaux-Arts, gaining second place among the pupils received at the admission examination. At the Ecole he received the Muller Schœné prize given to the pupil in the second class who during the year had obtained the greatest number of *récompenses*. When he was barely seventeen war was declared,



M. Henri Paul Nénot, Member of the Institute of France.



An Athenæum: Prix de Rome Design.

and Nénot joined the Francs-tireurs de la Presse, who distinguished themselves at the attack upon Bourget. The eager, forceful nature of the young soldier soon attracted attention, and at eighteen years of age he received the Médaille Militaire, his first distinction, which was soon followed by several others.

At the end of the war, however, Nénot found himself in extremities (as did a great many others of his compatriots), and for a year or more was obliged to wear his old uniform in default of the wherewithal to purchase a new suit of clothes. Arrived now at the highest honours which can be bestowed upon him—and doubtless also very well-to-do—the Membre de l'Institut takes a special pride in the fact that he had to mount the ladder to success from the very bottom. And is it not, in fact, all the more to his honour that he had to make his fortune by his own labour and merit?

After the war, in 1873, he became a Volunteer with the 30th Regiment of Artillery, where he intended to remain and make the army his career, as he believed that war would again break out, and his country would require his services in the field. It required all the authority and persuasion of his former instructors to induce him to re-enter the Ecole des Beaux-Arts.

From the atelier of Monsieur Lequeux Nénot went to that of Monsieur Questel (afterwards of M. Pascal), bearing a letter in which M. Lequeux said: "C'est un futur grand prix de Rome que je vous envoie." Being obliged to find a means of existence while continuing his studies, he found a place in the office of Charles Garnier, architect of the Grand Opéra.

In 1875, in association with Oudine, a son of the famous engraver of medals, he first tried the road of competitions. In the open competition for the construction of a normal school and collége communal at Huy, Belgium, they won the first prize, and were charged with the execution of the work.

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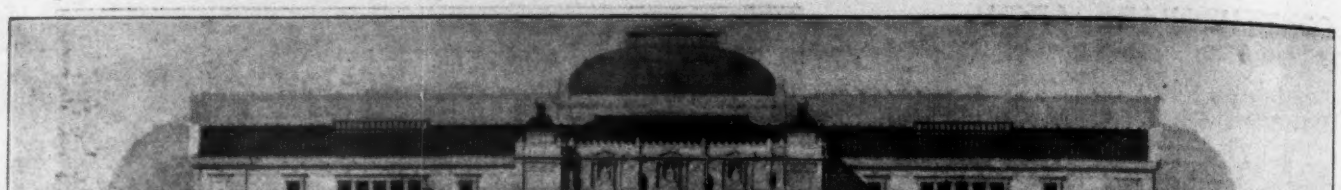
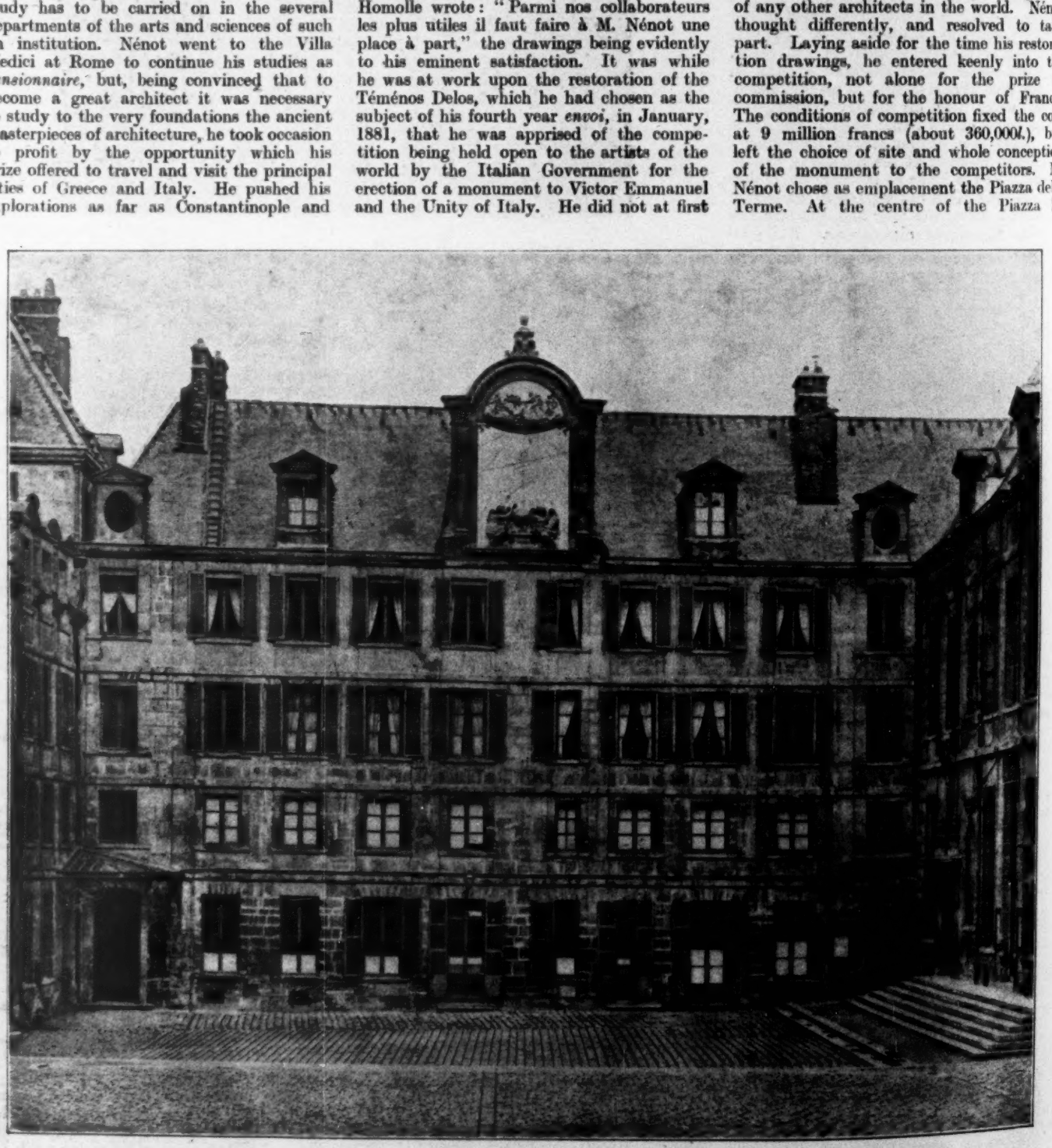


An Athenæum: Prix de Rome Design.
(By H. P. Nénot.)

Two years later, in 1877, Nénot won the Grand Prix de Rome, fulfilling the prediction of M. Lequeux. The problem was an Athenæum—somewhat similar in its general conditions to that of the Sorbonne, which a few years later was to bring him fame and a respected position among contemporary architects, which demanded the study of the various special conditions under which study has to be carried on in the several departments of the arts and sciences of such an institution. Nénot went to the Villa Medici at Rome to continue his studies as *pensionnaire*, but, being convinced that to become a great architect it was necessary to study to the very foundations the ancient masterpieces of architecture, he took occasion to profit by the opportunity which his prize offered to travel and visit the principal cities of Greece and Italy. He pushed his explorations as far as Constantinople and Asia Minor, and finished them in Egypt in 1880, thence returning to Rome.

Among the works upon which he was engaged during this time was that of taking the measurements and making the drawings of the buildings and fragments of ancient Delos which were being excavated under the direction of M. Homolle, of the Ecole d'Athens. Of Nénot and his work M. Homolle wrote: "Parmi nos collaborateurs les plus utiles il faut faire à M. Nénot une place à part," the drawings being evidently to his eminent satisfaction. It was while he was at work upon the restoration of the Téménos Delos, which he had chosen as the subject of his fourth year *envoi*, in January, 1881, that he was apprised of the competition being held open to the artists of the world by the Italian Government for the erection of a monument to Victor Emmanuel and the Unity of Italy. He did not at first intend to participate, but was roused to do so by an argument into which he had been drawn with an Italian acquaintance. Nénot had expressed the view that the competition for a monument to glorify Italian unity should have been restricted to Italian artists. The Italian, who was also a young architect, laconically replied that that would, of course, result, as the Italians were easily the superiors of any other architects in the world. Nénot thought differently, and resolved to take part. Laying aside for the time his restoration drawings, he entered keenly into the competition, not alone for the prize or commission, but for the honour of France. The conditions of competition fixed the cost at 9 million francs (about 360,000*l.*), but left the choice of site and whole conception of the monument to the competitors. M. Nénot chose as emplacement the Piazza delle Terme. At the centre of the Piazza he



The Sorbonne: Original North Side of Court.

raised a column surmounted by a gilded bronze statue of Victor Emmanuel; at the base were arranged eight seated figures representing the principal towns of Italy; around this he planned a wide exedra with the front open towards the Thermes of Diocletian, and broken by a large triumphal arch, which served as an entrance to the Via Nazionale. In the bays of the porticoes, ornamented with paintings and sculptures, were placed to the left records of ancient Roman history, and to the right records of the history of mediæval and modern times, including the wars of independence. Fountains and balustrades surmounted by statues completing the decoration of the place were composed upon the model of the Forums of Trajan and Agustus.

Two hundred and forty artists of diverse nationalities competed anonymously. The designs were examined and exhibited early in the year 1882. After the first examination a vote of the jury was taken, and of the seventeen votes cast M. Nénot received sixteen.

Having left Rome before the competition was judged, and having spent all his allowance on travelling, Nénot found himself in a difficult position, without money enough to take him back to Paris, when he received the good news that the prize of 50,000 lira had been awarded to him, the execution being withheld.

Afterwards the monument was again placed in competition, but discretion was exercised and it was restricted to Italian artists, and the site, officially fixed this time, at the Capitol. The programme, however, was inspired by the general dispositions of Monsieur Nénot's design.

The prize gained in the first competition for the monument enabled Nénot to undertake a journey round France, during which he sought the study of the requirements of utility. The visits which he made to many buildings devoted to various special uses doubtless had a beneficent effect upon the design which he was shortly afterwards to enter in a competition which was about to be held in Paris, which was of much greater importance than those in which he had previously participated with such success. This was for the reconstruction of the Sorbonne.

To this task he brought, with the double experience of having restored an ancient monument and conceived a modern one concurrently, all the promise of a talent nourished at the highest and most subtle sources of inspiration.

The sum voted in the summer of 1881 for the restoration and rebuilding of the Sorbonne was 22 million francs (about 880,000*l.*), of which the State and the City of Paris each provided half. The prize awarded to the *lauréat* was 25,000 francs.

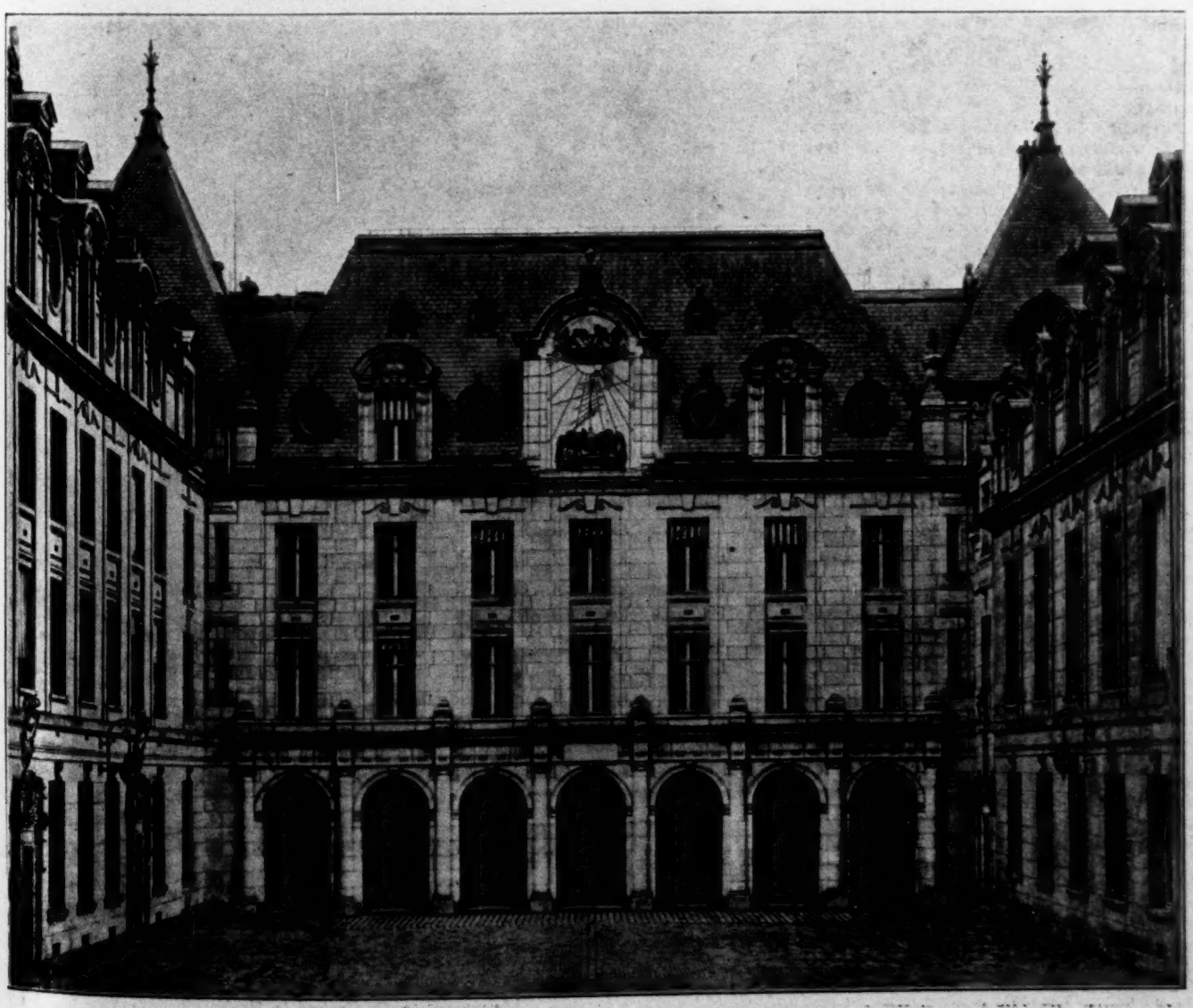
The competition was one of those happy ones which brought to light many interesting *projets*. Of the twenty-eight finished designs, presented in December, 1882, ten were considered to be entitled to premiums. Nénot's design was placed first by a unanimous jury. But one question was raised as to the result; it was as to whether a work of such magnitude should be confided to an architect who had not yet reached the age of thirty years.

M. Alphand, president of the jury, was of the opinion that a more experienced architect should be given charge of the execution of the work; but Charles Garnier, who had himself been on the same footing as his young *confrère* when he won the competition for the Grand Opéra, warmly espoused the cause of Nénot, who had formerly been his pupil. The reproaches which the French Press had heaped upon the Italian Government because it did not confide the execution of the monument to Victor Emmanuel to Nénot, who had deserved the commission, were brought to the attention of the jury. Finally it was decided to assign the execution to the winner of the competition, and in 1883 he received official instructions to visit the universities of Germany, Austria, Belgium, and Holland. Upon his return active work upon the final drawings began; and about a year later the contracts for the first part of the work were let and the ruinous structures between the old Sorbonne and what is to-day the Rue des Ecoles fell under the pick and shovel of the workmen on August 29, 1884. The first stone was laid on August 5, 1885. The whole of the structures were finished in July, 1901. The works occupied, therefore, seventeen years' continuous labour, and were divided into three parts, as follows:—

First, the Academy proper, the basement of which was finished in 1885, including the Grand Amphitheatre, with its complement of vestibules and offices, retiring-rooms, etc., and the various adjoining rooms, and the College of Literature, which form the north block of the Sorbonne—*i.e.*, the part between the Court of Honour and the Rue des Ecoles.

Second, the part of the College of Sciences which commences at the church, extends to the Rue Cujas which bounds the buildings on the south side; commenced in December, 1888.

Third, the Library; the completion of the College of Sciences, which extends along



The Sorbonne: North Side of Court as Rebuilt.

the Rue Saint Jacques; the completion of the College of Literature along the Rue de la Sorbonne; the School of Higher Studies and the School of Maps, which came to occupy the site originally allotted to the College of Theology.

It comprises, besides the suite of rooms pertaining to the Academy and the offices of the Colleges, the following apartments devoted wholly to instruction:—Twenty-two amphitheatres, including the great hall which seats 3,000 persons; five libraries; two art museums; sixteen examination halls; twenty-two study or conference rooms; thirty-seven offices of headmasters; 240 laboratories, professors' laboratories, and pupils' laboratories equipped with their furniture, furnaces, hoods, movable blackboards, and other apparatus of all sorts.

While all this was in progress of construction the lessons, studies, practical work and exercises and examinations followed their usual course without it being necessary to disturb the regularity of the scientific life of teachers or pupils by suspending work for even a single day.

The whole structure, including the old church—designed by Lemercier—which is retained as part of the group, covers a built-upon area of about 198,000 sq. ft. But a better idea of its extent is gained from the extreme dimensions, which are as follows:—272 ft on the Rue des Ecoles—the principal façade in which is the main entrance to the Academy, 285½ ft. on the Rue Cujas, 761 ft. bordering upon the Rue de la Sorbonne and Rue Victor Cousin, and 866 ft. along the Rue Saint Jacques.

The Sorbonne stands on the side of a hill, and the difference in level between the Rue Cujas and the Rue des Ecoles equals the height of two stories. The difficulties caused by this inconvenience have been overcome in a highly successful manner. The internal arrangement of steps and levels has been so cleverly arranged that one may pass from end to end of the building without realising that one has, by the time one reaches the southern end, mounted to the level of the second story of the building which one enters at the northern end, or, in fact, that the level has changed at all.

The size of the buildings; the difference in levels; the complexity of requirements of the several departments—especially those in the College of Sciences; the fact that a new principle in education was just dawning upon the country—the reform in the method of imparting higher instruction formulated by Armand de Mesnil and advanced by Liard, who gave it the powerful and decisive impulse which carried it into the planning of the new Sorbonne; the necessity of carrying on the works so that the study going on in the old buildings might be undisturbed; the desire to retain the beautiful church left by Richelieu and Lemercier, and, as far as possible, the character of the old college buildings themselves—all contributed to the difficulties in the way of the architect: each presented its peculiar problems which he had to overcome.

From whatever point of view one studies the Sorbonne—as a work of art, as to the practical organisation of the diverse parts of an educational machine, as to the original treatment of new and peculiar conditions, as to the system and sequence of carrying on the construction in parts, or as a "restoration" on sane lines, and the combination of the new with the existing buildings—one finds it very successful. Nénot has a genius for combining with the great traditions of architecture the most ingenious solutions of practical problems.

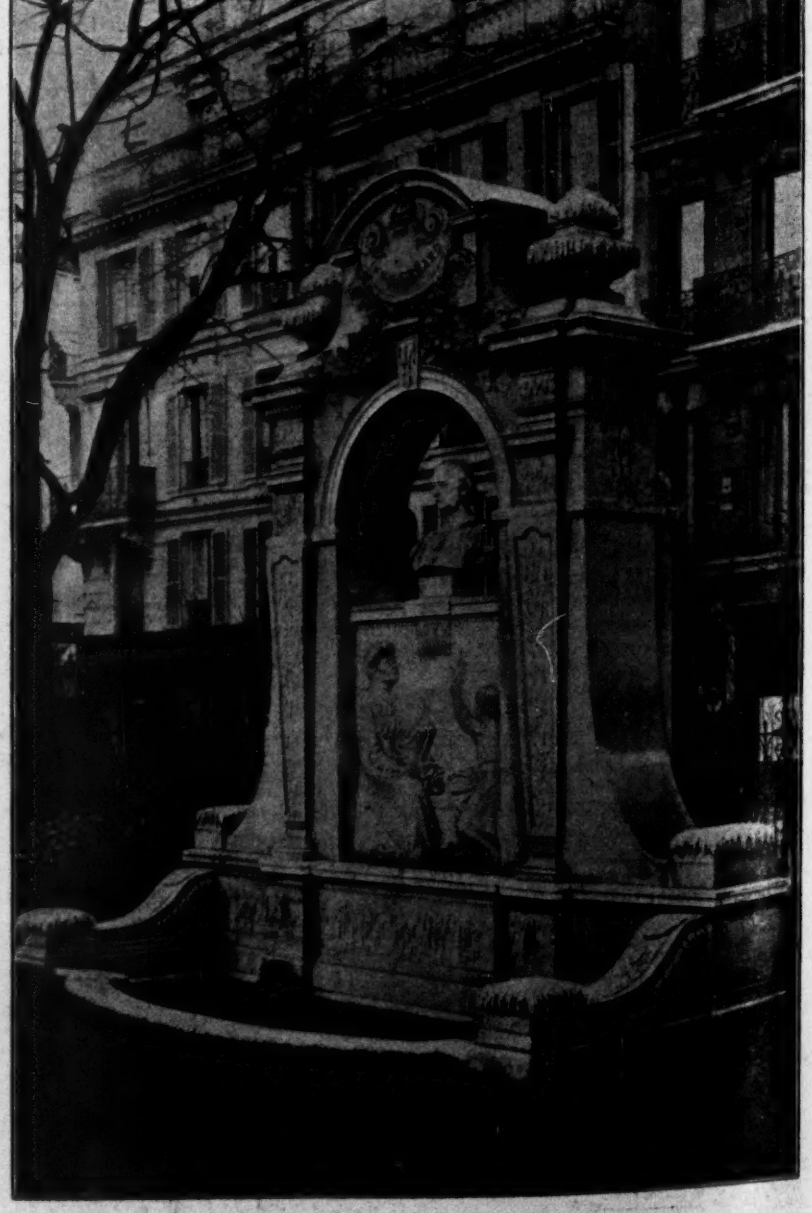
The immense scale of the principal front; the great air and "grand manner" which pervades it; the magnificent vestibule and grand staircase leading to the sumptuous landing which crowns it; the splendid Grand Amphitheatre; the fine dignified Court of Honour with the old church at one end—afford, by contrast to them, a remarkable surprise when one comes upon the lecture, study, and work rooms all so simply accommodated to their destination.

The new methods of instruction above referred to had for their object the forming of the pupils to methods of scientific research and the critical study of original documents and texts. To obtain the most direct action and personal influence of the professor, it was sought to dispense with everything which was not simple, direct, and exact; to bring the teacher nearer to the pupils by diminishing the number around his chair, and reducing the conference to the lesson. In the matter of education the material organisation must be the first element of any reform, not only because it is the sign, but because it becomes the rule. It speaks to the eyes and so imposes itself. There is a great deal of psychology in the most modest school installation intelligently conceived.

Nearly half of the total ground area of the Sorbonne is given up to the College of Sciences which externally is marked by the large amount of glass surface, suggesting a suite of perfected workshops, of which indeed the college is composed. Internally these workshops do not exclude elegance, and all are arranged, disposed, combined for scientific usage.

Monsieur Gréard, the Chancellor, has given an account of how the architect and his counsellors had to become by turns physicians, chemists, botanists, mineralogists, physiologists, geographers, astronomers, etc. It was necessary to penetrate deeply into the secrets of the sciences. The laboratory of physical research, with its gallery of 65 metres, divisible by means of movable partitions into five distinct little laboratories, its photographic rooms, its ateliers, with forges, its cellars of magnetic apparatus; the department of botany, with its glass houses, hot, cold, and temperate, its great hall for microscopic examination and manipulation open to the north, in front a great uninterrupted glazing of plate glass, about 80 ft. in width; the department of physiology and its gallery-amphitheatre and its round hall of demonstrations, its stove and crematory furnace—are, among others, marvels of appropriateness to modern instruction. By a facility of procedure gained and kept constantly alive by the requirements and demands of the indefatigable professors and by ever-present difficulties before him the architect, exploiting orientation, varying the height of rooms, utilising the depth of cellars, arranging platforms upon the roofs, etc., has created in the space, so to speak, nearly double the ordinary resources of the site.

The construction of the laboratory of physical research nearly brought him to his end when they asked him to construct a tower as high as possible in which to make experiments on the speed of sound and light. Above the level of the cellar floor he raised it to a height of 147½ ft., and below that level he sank a well 279 ft. deep, and would have carried it deeper, but was stopped by a sheet of water found at that depth.



Monument to O. Gréard in Paris.
Architect, H. P. Nénot; Sculptor, M. Chaplain.

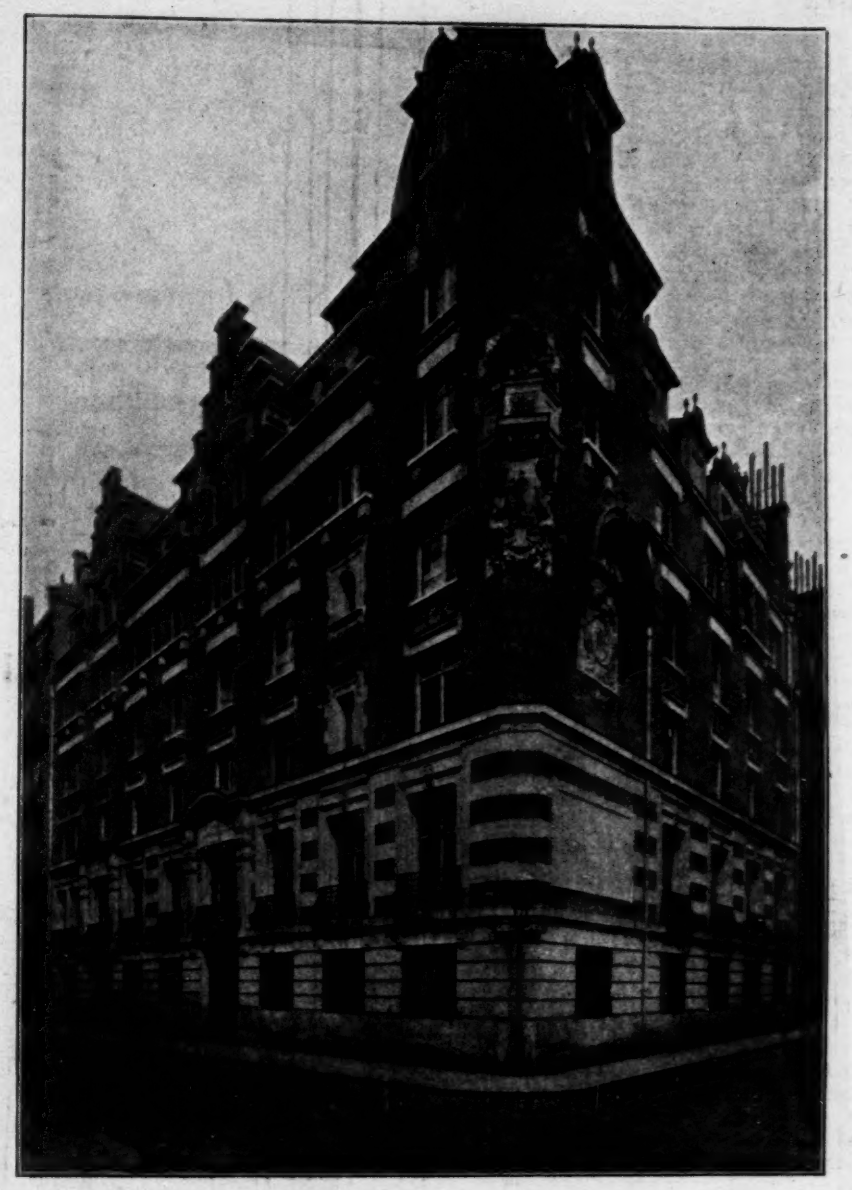
Inside, a tube 216 ft. long was constructed with a test-room at each end equipped with telephones, electric apparatus, and all the perfected instruments of observation. The field upon which higher instruction enters is practically limitless, and, large and complete as the Sorbonne is, during the course of the nine years which have elapsed since its completion the buildings have become too small, and large extensions, or rather a new group of buildings for the chemical college, have been planned, and will soon be in course of construction upon a neighbouring site.

It would be impossible to describe in an article such as this the special and novel features introduced in this vast building. In his work upon the Eléments et Théorie de l'Architecture the late Professor Guadet has devoted three chapters of the second volume to a description of the more important parts of the Sorbonne. In a building containing so many interesting scientific features one is apt to forget its nobler aspect, and to regard it as something intended for use, and think of it less as a part of the great city which by its beauty exerts an influence upon the world in an ideal way, and accomplishes directly that which all the sciences only assist in an ancillary way—the ennobling of human nature, the creation, by its effect upon the sense of sight, of the desire :—

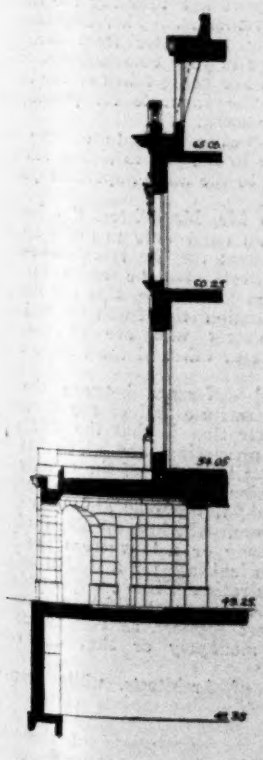
"Better things to see,
And making life more pleasant."

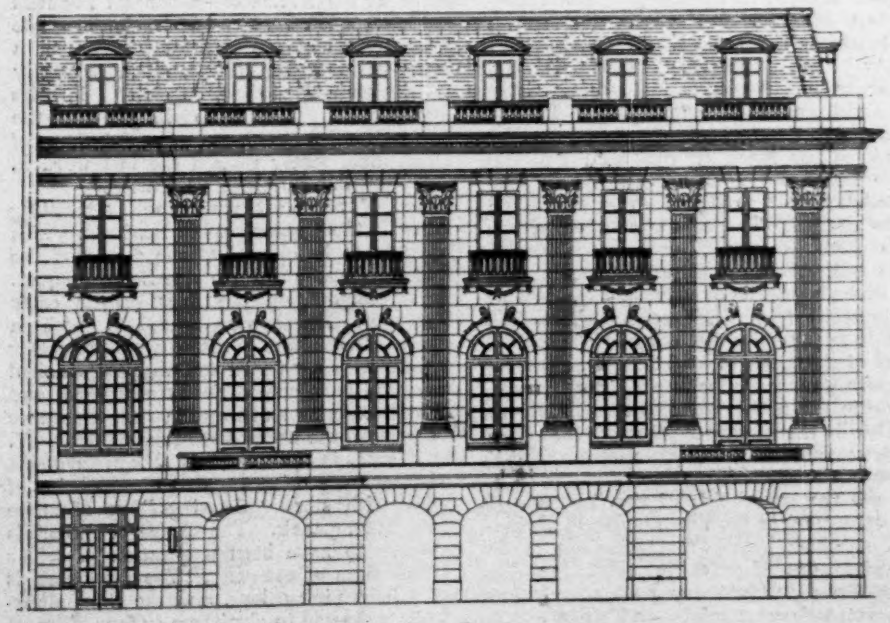
As architecture, the Sorbonne holds an enviable position among the modern monuments of Paris. If one excepts the new parts of the National Library by M. Pascal, one may safely state that nothing has been erected in Paris since Ginain built the Library of the Ecole de Médecine which, in point of refinement, excellence of scale and detail, and well-balanced imagination displayed in the composition of the façade, can be compared with it. In the Court of Honour he has maintained the character which gave to the work of Lemercier its distinguished physiognomy—the high roofs, the beautiful balance of void and solid *ordonnance*, fenestration, which the projecting pavilions interrupted without breaking the harmonious continuity of the whole effect; the terrace which formed a paved square—parvis—at the side entrance to the chapel, and the general aspect of grandeur, all have been conserved in the modern buildings, while the air of the cloister which haunted the old structures has entirely disappeared. Throughout the image of work and life is reflected. It would have been impossible to better render homage to the souvenirs of the past while providing for the needs of the present, nor to have marked with greater respect and independence the hereditary claims of the two monuments.

It is needless to dwell upon the beauty of the interiors; few visitors to Paris neglect

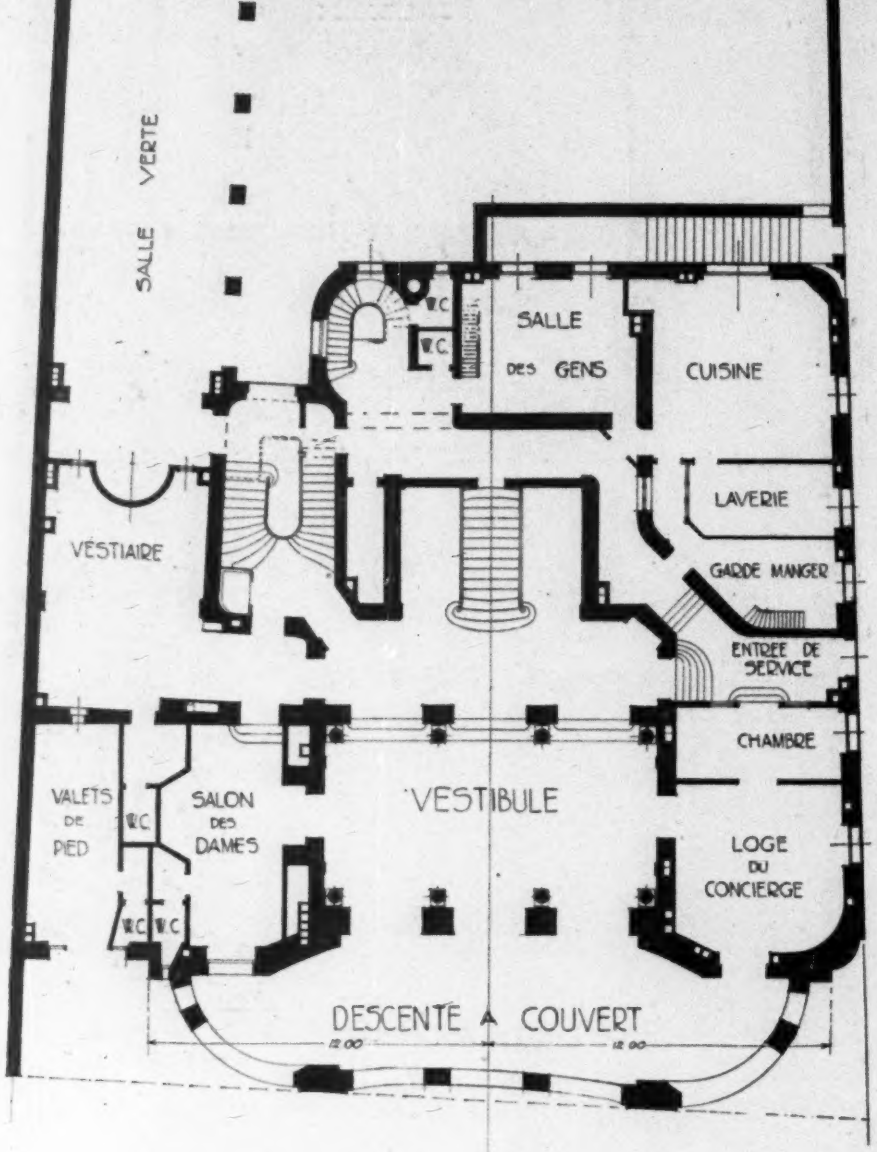


Offices for Wagons-Lits.
(By H. P. Nénot.)





Propriété de Mr. Blumenthal. Section and Elevation.
(By H. P. Nénot.)



A Private House, by H. P. Nenot.—Ground Plan.

to visit the great amphitheatre, containing the fine painting by Puvis de Chavannes, nor fail to be impressed by its grandeur and beauty. The decorative detail of the numerous fine rooms is almost invariably restrained and in excellent taste. In one room only, the Salle du Doctorat, has he permitted his fancy to run riot; but this single instance proves what *tours de force* he might have produced everywhere had he so desired. The ceiling consists of one huge cartouche, and it is so well handled as to make one wish, almost, for more.

Although M. Nénot doubtless has a long career still before him, it seems probable that this huge task which occupied seventeen years of the prime of his life, will remain his greatest work. It has already found recognition in the newer histories of architecture, and will there remain among the finest achievements in architecture of the XIXth century.

Since the completion of the Sorbonne he has continued to produce numerous works—one of which gained first premium in the Concours des Façades in 1902, including large town and country houses and some important commercial and educational structures, and some very interesting commemorative monuments. Among the most interesting of these are the administration offices of the International Sleeping-Car Company in Paris, in which M. Nénot has endeavoured to give a cosmopolitan expression to the architecture; the large bank and offices for *La Nationale*—a general financial and insurance company—a striking example of the treatment proper for a building on a corner site—strong in planning, scholarly and "studied to a finish" in its proportions: the remodelling of the Hotel Meurice in Paris, the interiors of which must surely remain the last word in elaborate and exquisite decoration.

One of his most recent and interesting works is the Oceanographic Institute, which is about to be opened at the corner of the Rue Gay-Lussac and the Rue Saint Jacques. It is designed on the lines of the early Florentine Renaissance buildings with a square tower and ornate wide-projecting cornice with a painted soffit. The principal elevation is unsymmetrically composed, and is built of brick and stone in such a manner as to recall the work of the time of Henri IV. in France, in which one is always in doubt whether to describe the structure as being of brick with stone "dressings" or of stone with brick panels. The choice of materials appears to have been a question of colour rather than of economy. The brickwork is of a light pink colour, and the Caen stonework is dressed to give three or four different textures varying from a pitched face to a fine-axed surface. The ornamental detail is placed in exactly the right positions for the effect of the whole front, and is as refined as it is immensely clever.

To be erected on the site adjoining the Oceanographic Institute, with one end towards the Rue Saint Jacques and facing a new street (in process of construction), Monsieur Nénot has planned the extensions to the Sorbonne which will house the department of chemistry of the College of Sciences and also the Radium Institute.

In the square in front of the Sorbonne is a little monument by M. Nénot.

In the competition for the Reformers' Monument at Geneva his design, submitted in association with two sculptors, was placed second.

The above list includes the principal artistic works of M. Nénot, exclusive of several fine residences, which, though many of us would find charming examples of modern architecture—any of which would make a local reputation for a less fortunate artist—M. Nénot himself does not seem to consider of enough importance to catalogue among his serious works. Commencing with the Medaille Militaire—a kind of French "Victoria Cross"—decorations and distinctions have come more rapidly to him than to most of his compeers. Among others he is an Officier de l'Instruction Publique. He was created Chevalier of the Légion d'Honneur in August, 1885, Officier in February, 1985, and Commandeur in January, 1901. He was elected a member of the Institute of France—Academy of the Fine Arts—October 25, 1895. He was awarded a Gold Medal at the Universal Exposition of 1889, and a Grand Prix at that of 1900.

He married, in November, 1886, Mlle. Isabelle Mathias, daughter of the Chief Engineer of the Northern Railway of France, by whom he has four daughters. In appearance he is an erect, powerfully-built man of medium height, energetic in movement. His strong jaw, his well-trimmed hair and beard, his keen, alert blue eyes, his prompt, exact speech, and, above all, his amiable modesty, contribute to the military bearing and stamp him as a leader of men.

Among his *confréres* he is known for his honourable frank disposition and decisive character; and for that reason he is frequently called upon to act as a juror or preside over the adjudication of competitions for public buildings or works exhibited at the Salon.

CORRESPONDENCE.

Architects and the R.I.B.A.

SIR,—The Institute is showing some anxiety as to the result of their Licentiate scheme, which obviously is not fulfilling the expectations of its promoters. This impression is strengthened by the letter from Mr. MacAlister published in your current issue, and by the steps which are being taken or are in contemplation by the Institute for pushing this branch of their work.

I do not, however, wish to enlarge upon this, but rather to ask you to kindly allow me to refer chiefly to the more important question of registration.

According to Mr. MacAlister, the Institute is pledged at an early date to make application to Parliament for the recognition of all *bonâ-fide* architects, but he omits to state, what is common knowledge, that for the purpose of registration the Institute will only recognise architects who are at the time members of one or other of the classes within the Institute.

The essential difference between the proposals of the Institute and of the Society in regard to registration is that the Bill which the Society is promoting, and which has been amended in detail in view of the coming Parliamentary session, provides for the registration of all *bonâ-fide* qualified architects in the United Kingdom, whether members of any architectural body or not, whereas the Institute propose to legislate for a section only.

If two registration Bills are presented to Parliament, it is apparent which of them will receive the most support, as Parliament will not grant a monopoly or shut out vested interests.

The Society of Architects, while prepared to meet objections on points of detail in regard to their Bill, will not give way on the principle—that is, registration of the whole profession. Architects who become licentiates of the Institute on registration grounds are

therefore wasting their time and money, because registration of the profession can only be secured by a bill similar in principle to that promoted by the Society, and it is only a Bill on these lines whch has any chance of becoming law.

C. McARTHUR BUTLER,
Secretary, Society of Architects.

Recess, Harewood Castle.

SIR,—With regard to the letter in your issue of the 12th inst. from J. D. Crace, accompanying an interesting photograph of the above named, I take the liberty of remarking that the tradition in my family, who in old time possessed Harewood Castle, has always been that the "recess" was a genuine credence table at which meats were tasted before being served to the lords and their guests. Why it should have been made so much of and treated with such graceful architectural care I cannot say, unless, indeed, the tasting was done with some ceremony with a view to giving guests additional confidence.

Better antiquarians than I may be able to explain.

GEO. T. REDMAYNE,
F.R.I.B.A., retired.

SIR,—The recess at Harewood Castle, referred to in your issues of October 29 and November 12, will be found illustrated in "Architectural Studies in Yorkshire," with description and dimensions, published for me in 1887. The work, I think, can be found in the R.I.B.A. Library.

GEO. BERTRAM BULMER.

The Design of Waterloo Bridge.

SIR,—I note in your report of the Presidential address at the Institute that Mr Stokes (on the authority of Mr. A. E. Richardson) attributes the design of Waterloo Bridge to Ralph Dodd. This may be true of the constructional design, but the architectural design is the work of John Linnell Bond.

In this statement I am supported by the "Dictionary of National Biography," Redgrave's "Dictionary of Artists," and the "Architectural Publication Society's Dictionary." In the last of these it is mentioned that Bond's name appears as "assistant architect" in the Act of Parliament under which the bridge was built.

H. S. GOODHART-RENDEL.

Removal of Paints, Varnishes, etc.

SIR,—I have had put before me an invention by means of which paints, polishes, varnishes, and enamels can be removed very rapidly, without the slightest injury to the surface from which it has been taken. It will remove the hardest of paints in about twenty minutes, but in the majority of cases it will remove it in about five minutes. It is a liquid, and does not in any way affect material, brushes, or person using same, and it is also cheap.

I should be glad if you would kindly inform me through your correspondence column as to whether there would be a ready market for such a substance, and if there is any other paint remover which will act as the one mentioned.

JOHN H. PHILLIPS.

*** A liquid paint remover of the description mentioned in the letter from Mr. John H. Phillips is not novel. In 1903 Eberson was granted a patent for a paint remover made by dissolving any suitable wax or grease in benzine or carbon bisulphide, and adding alcohol or acetone (English patent 18,300, August 24, 1903). In 1902 C. Ellis was granted a patent for a mixture of a similar character (French patent 325,659, September, 1902). We are under the impression that there is a fairly good market for paint-removing compositions, but that competition is keen. We should not attach great value to any patent rights for the manufacture of such a composition.—ED.

COMPETITION NEWS.

Trevor Estate: Answers to Questions.

In reply to questions as to what buildings will be retained—Albert Gate Mansions, and the Princes' Club adjoining them, should be permitted to remain, but all other properties are to be regarded as removed, and no provision need be made for reinstating them.

To questions as to order of building—Probably as follows:—Blocks G and D, then E, then B and west part of A, and subsequently C and F.

To further questions—

The whole estate is shown on the plan accompanying conditions, but property may be required for footway into Brompton-road.

Artisans' dwellings are not required.

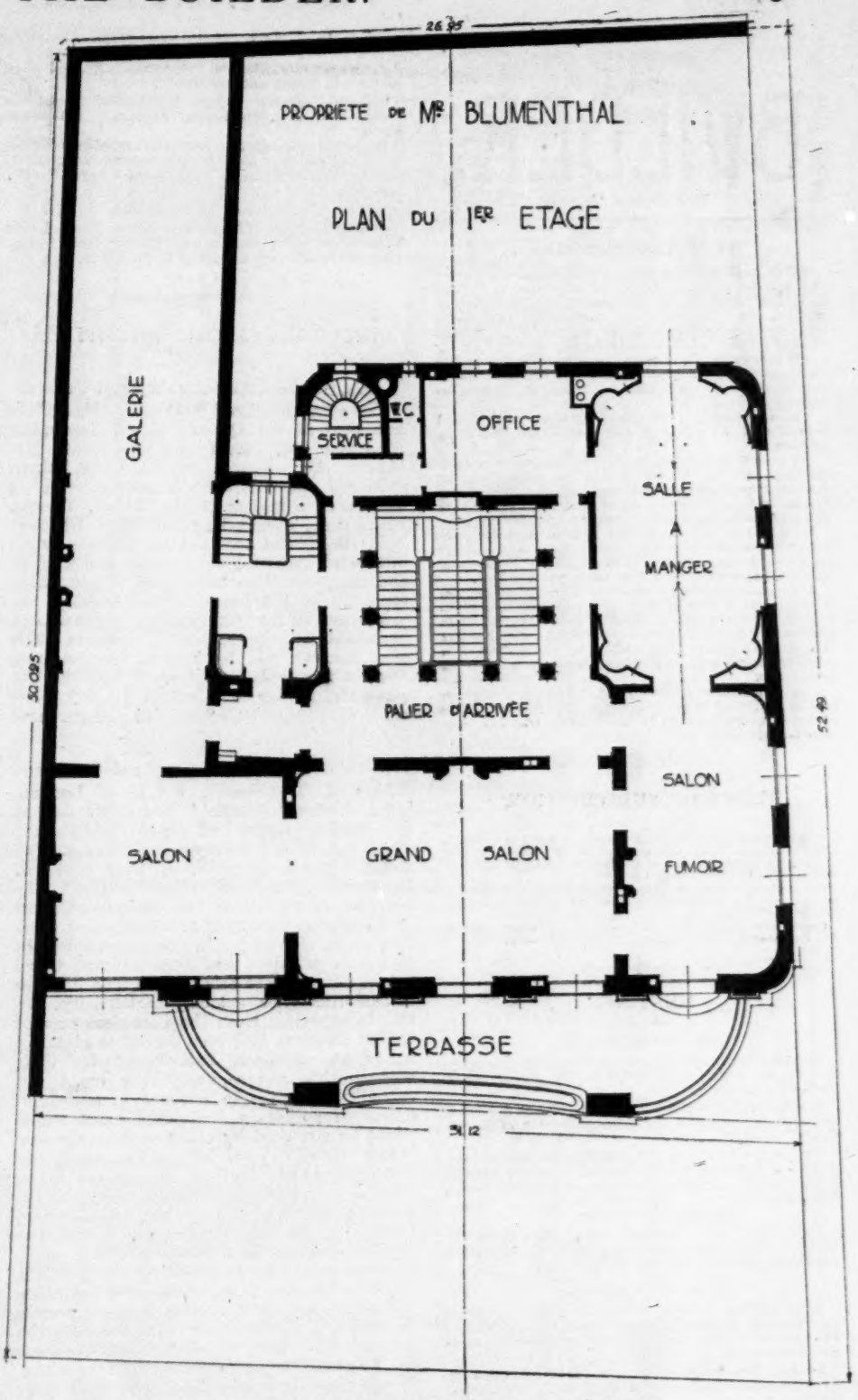
In estimating rentals the ground rent may be taken at 1s. 6d. per ft. super. for G, and 2s. per ft. super. for other blocks. The assessment of existing property averages about 50*l*. per house on G, and ranges from about 70*l* to 100*l*. on other blocks.

It is the freeholder's desire that such uniformity as architectural dignity may demand shall be adopted for the façades of the various blocks.

As stated in clause 12, all premiated designs will be exhibited to those taking up sites, but, of course, any recommendations will be based on merit as indicated by the award.

Competitors may inspect the Princes' Club on application to the hall porter.

It is not thought desirable to extend the time beyond January 14.



A Private House, by H. P. Nenot. First Floor.

Central Library for Deptford.

The Deptford Public Libraries Committee report, with reference to the decision to hold a limited competition in respect to the Central Library building, that they have considered the amount of the fee to be paid the assessor for adjudging the designs, and are of opinion that the services of an eminent architect could be obtained in this connexion for the sum of 50 guineas. They have fixed this amount accordingly.

Airdrie Town Hall.

The committee appointed to carry out the erection of a Town Hall for Airdrie with the 10,000*l*. provided by Sir John Wilson, Bart., has now considered the report by the adjudicator on the five sets of plans submitted to him. The design placed first is that by Messrs. James Thomson & Sons; second, Messrs. George Arthur & Son; and third, Mr. A. Dankin Aitken, all of Airdrie. The committee unanimously agreed that the plan placed first should be adopted, and Messrs. Thomson were appointed the architects of the new building. The second prize goes to Messrs. Arthur, and the third to Mr. Aitken. The design adopted is a building in the Renaissance style, with large hall to seat over 1,300, and lesser hall over the entrance in the front, with accommodation for 350. There are the usual cloakrooms for both halls, and every modern convenience. Instructions have been given for the schedules for the work to be prepared and sent out immediately.

THE
BUILDER.
NOVEMBER 19, 1910.

TO CORRESPONDENTS.

NOTE.—All communications with respect to literary and artistic matters should be addressed to "THE EDITOR" (and not to any person by name); those relating to advertisements and other exclusively business matters should be addressed to "THE PUBLISHER," and not to the Editor.

All communications must be authenticated by the name and address of the sender, whether for publication or not. No notice can be taken of anonymous communications.

The responsibility of signed articles, letters, and papers read at meetings rests, of course, with the authors.

We cannot undertake to return rejected communications; and the Editor cannot be responsible for drawings, photographs, manuscripts, or other documents, or for models or samples sent to or left at this office, unless he has specially asked for them.

All drawings sent to or left at this office for consideration should bear the owner's name and address on either the face or back of the drawing. Delay and inconvenience may result from inattention to this.

Any commission to a contributor to write an article, or to execute or lend a drawing for publication, is given subject to the approval of the article or drawing, when received, by the Editor, who retains the right to reject it if unsatisfactory. The receipt by the author of a proof of an article in type does not necessarily imply its acceptance.

N.B.—Illustrations of the First Premiated Design in any important architectural competition will always be accepted for publication by the Editor, whether they have been formally asked for or not.

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MEETINGS.

FRIDAY, NOVEMBER 18.

Royal Sanitary Institute (Lectures for Sanitary Officers).—Mr. H. P. Boulnois, M.Inst.C.E., on "Scavenging, Disposal of House Refuse." 7 p.m.

Institution of Mechanical Engineers.—Mr. L. A. Legros, on "The Development of Road Locomotion in Recent Years." 8 p.m.

University of London (Lectures on Advanced Engineering, at the Institution of Civil Engineers, Great George-street, S.W.).—Mr. W. Dunn on "Reinforced Concrete"—III. 5.45 p.m.

SATURDAY, NOVEMBER 19.

Association of Teachers in Technical Institutions (the Northern Polytechnic).—Mr. Sandham on "Grouped Courses for Evening Building Students."

MONDAY, NOVEMBER 21.

Royal Institute of British Architects.—Business meeting Consideration of the new draft regulations of the Royal Institute of British Architects for architectural competitions. 8 p.m.

London Institution.—The Rev. T. T. Norgate on "Corsica, the Land of the Vendetta." Illustrated. 5 p.m.

University of London (Imperial College of Science, Exhibition-road).—Mr. Banister Fletcher on "The Mediæval Castles and Civic Architecture of Italy." 5 p.m.

Liverpool Architectural Society.—Mr. I. B. Budden, M.A., on "The Work of Alexander Thompson." Lantern slides. 6 p.m.

Junior Institution of Engineers (Caxton Hall, Westminster).—Fourth lecture on "The Law Relating to Engineering," by Mr. L. W. J. Costello, M.A., LL.B. 7.30 p.m.

TUESDAY, NOVEMBER 22.

University of London (British Museum).—Mr. Banister Fletcher on "The Doric Temples of Greece, South Italy, and Sicily." 4.30 p.m.

Institute of Sanitary Engineers (Students' Lecture).—Mr. Nandy Hoskins on "Hydraulics and Hydrostatics." 7 p.m.

The Institution of Civil Engineers.—H. K. G. Bamber, Assoc.Inst.C.E., on "Portland Cement, and the Question of Aeration." 8 p.m.

WEDNESDAY, NOVEMBER 23.

Architectural Association.—Conversazione, No. 18, Tufton-street, S.W. 8 p.m.

Manchester Society of Architects.—T. G. R. Dehn, Barrister-at-Law, will read a paper entitled:—"The Architect as Judge." 6.30 p.m.

THURSDAY, NOVEMBER 24.

Leeds and Yorkshire Architectural Society.—Mr. Arthur Marshall on "Spanish Places and People." 6.30 p.m.

University of London, University College (the Carpenters' Company Lectures on Architecture).—Mr. J. A. Gotch on "The Homes of Queen Elizabeth's Courtiers: Interiors." 6 p.m.

Institution of Electrical Engineers.—Mr. Haydn Thies Harrison on "Street Lighting by Modern Electric Lamps." 8 p.m.

FRIDAY, NOVEMBER 25.

Birmingham Architectural Association.—Mr. Felix Clay on "Art in Theory and Practice."

Glasgow Technical College Architectural Craftsmen's Society.—Mr. J. R. Hacking on "Belgium." Illustrated. 8 p.m.

University of London (Lectures on Advanced Engineering, at the Institution of Civil Engineers, Great George-street, S.W.).—Mr. W. Dunn on "Reinforced Concrete"—IV. 5.45 p.m.

SATURDAY, NOVEMBER 26.

Junior Institution of Engineers.—Visit to Messrs. David Kirkaldy & Son's Testing and Experimental Works 99, Southwark-street, London, S.E. 2.30 p.m.

ARCHITECTURAL SOCIETIES.

Leeds and Yorkshire Architectural Society.

The opening general meeting of this Society was held at the Queen's Hotel, Leeds, on November 10, when the President, Mr. Sidney D. Kitson, M.A., F.R.I.B.A., delivered his address. A cordial vote of thanks, on a motion of Mr. W. H. Thorpe, F.R.I.B.A., seconded by Mr. H. S. Chorley, F.R.I.B.A., was accorded Mr. Kitson by an interested gathering of members and friends, and the proceedings terminated in a smoking concert. In the course of the evening, the prizes won in the Society's competitions were presented to the successful students. The next meeting will be held in the Society's room in the Leeds Institute, on November 24, when Mr. Arthur Marshall, A.R.I.B.A., will read a paper on "Spanish Places and People."

Sheffield Society of Architects and Surveyors.

Mr. W. T. Creswell, F.S.I., of London, lectured at the Sheffield University on the 10th inst. to members of the Sheffield Society of Architects and Surveyors on "Taxation of Land Values." Mr. W. J. Hale presided. In recent years, said Mr. Creswell, the tendency of legislation had been to shift an increasing proportion of the burdens of taxation on to the land. In the Finance Bill of 1909 this principle had been adopted to an extent never before attempted. The Act was full of difficulties, not only to the laity, but also to experts. Even the Commissioners of Inland Revenue had been forced to state, in answering inquiries, that they gave their replies with reserve, as "they could not commit themselves in advance to a definite course of action in individual cases which might be governed by circumstances not now before them." The Act really meant the compilation of another Domesday Book. Having gone through Form IV. and given his view in regard to the meaning of the more important queries, Mr. Creswell said the public mind had been much exercised as to the best and proper method of filling in the form. As the law stood, the question naturally arose as to whether it was advisable to facilitate a high figure being fixed for the original site value, or whether a low figure, or whether to be moderate and cautious. There were those who held that when land was developed it was advisable to facilitate a high figure being fixed, and even when land was undeveloped this might also apply. Among points to be considered were the possibility of the land being required for compulsory purchase; the total value would affect the death duties, one or other of the values might become the future assessable rateable value; future taxes might be levied on the total site value; and valuations for the purposes of the State would be based on the 1909 valuation. The "optional" questions were most difficult to fill in, and it was generally thought they would be best left to the Government valuer. The deduction should be claimed.

Mr. W. C. Fenton proposed a vote of thanks to the lecturer, and Mr. C. B. Flockton seconded. Mr. W. G. Buck and Mr. E. M. Gibbs supported, and the resolution was adopted, and Mr. Creswell briefly responded.

York and Yorkshire Architectural Society.

At the general meeting of the York and Yorkshire Architectural Society, the following officers for the forthcoming session were elected:—President, Mr. Samuel Needham; Vice-Presidents, Mr. A. B. Burleigh and Mr. J. H. Rutherford; Hon. Treasurer and Assistant Secretary, Mr. R. R. T. Smith; Hon. Librarian, Mr. A. Cowman; Hon. Secretary, Mr. Harold E. Henderson; Members of Council, Mr. W. T. Whipp, A.R.I.B.A., Mr. H. Monkman, Mr. K. Ward, Mr. J. Ferguson, Mr. F. Dyer; Auditors, Mr. W. M. Carter and Mr. J. Reid.

FIFTY YEARS AGO.

From the *Builder* of November 17, 1860.

Some of the Work We Have to Do.

MANY of our provincial towns, wealthy and thriving, are in a discreditable state, and need thorough revision and improvement. A correspondent entitled to speak writes thus appositely:—

"I was at Leeds," he says, "about ten days since for three or four hours, and I was surprised and disgusted to think that such a wealthy place should be so mean and filthy. It forms a sad contrast to the towns abroad of a like description, where, by means of ample local funds, the municipalities can afford to do noble works and found grand establishments.

Their Briggate at Leeds is a wide thoroughfare, but with low-class shops on each side, and reminded me of the High-street in the Borough (Southwark); the end is blocked up by a building running quite across. There are no cross streets of any ample width, and you have to go from one side to the other of the town through streets about the width and character of Drury-lane.

We want an autocrat, as at Paris and Lyons, to compel noble lines of access and thoroughfare to be formed, and introduce salubrity, comfort, and nobility into most of our towns. This should not be left to the enterprise of an individual, as at Newcastle, or to the supineness of low interests and selfish money-makers. Analyse our provincial towns in detail—lay bare their hideousness, and suggest their improvement. Shame them, and good must be done. Our recent legislation for such matters has been only *permissive*; it should be *imperative*."

*** We still await the autocrat.—ED.

ILLUSTRATIONS.

The Sorbonne.

OUR illustrations of the Sorbonne are given in connexion with an article on another page on the work and career of M. Henri Paul Nénot, member of the Académie des Beaux-Arts of the Institute of France.

MASTER BUILDERS' ASSOCIATIONS, etc.

London Master Builders' Association.

A Council meeting was held at Koh-i-Noor House, Kingsway, W.C., on the 10th inst., Mr. Leonard Horner, President, in the chair.

Report was received from the Committee on the London County Council suggested building regulations in connexion with reinforced-concrete construction.

A long discussion took place on the land value duties, together with their effect upon the building industry, and the matter was referred to the Committee for further consideration.

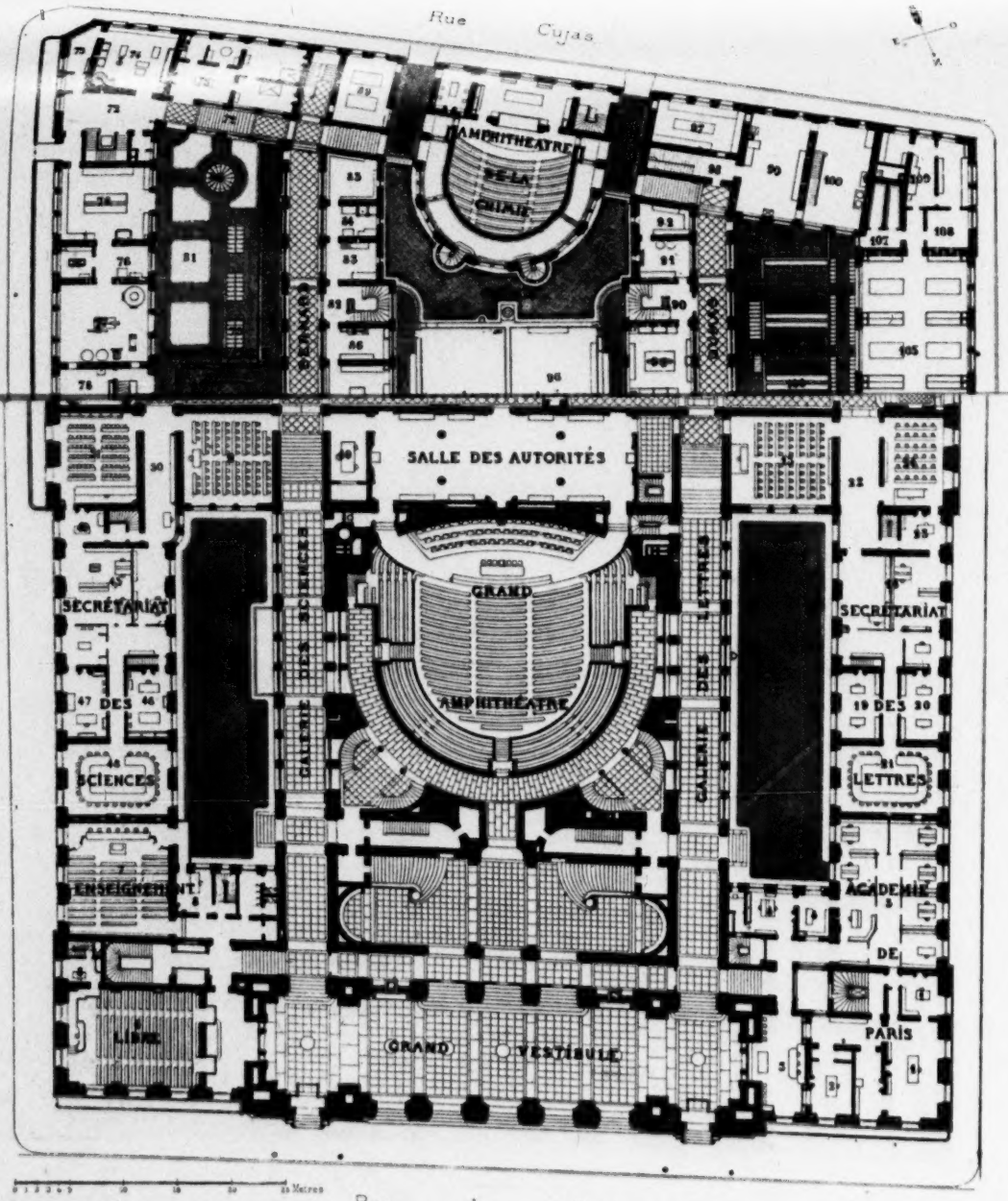
The Organisation Committee's report was received and new members were elected.

Final instructions with regard to the composition of the Diary and Hand-Book were given, and the book will be issued the first week in January, 1911.

The requisition made to the authority by the Council as regards measurements of slating and roof tiling has been agreed upon, and the new method of measurement will take place from January 1, 1911.

The question of apprenticeship was again discussed, and the movement is receiving very favourable support.

Members were elected to fill certain offices on the National Federation of Building Trades Employers of Great Britain and Ireland.



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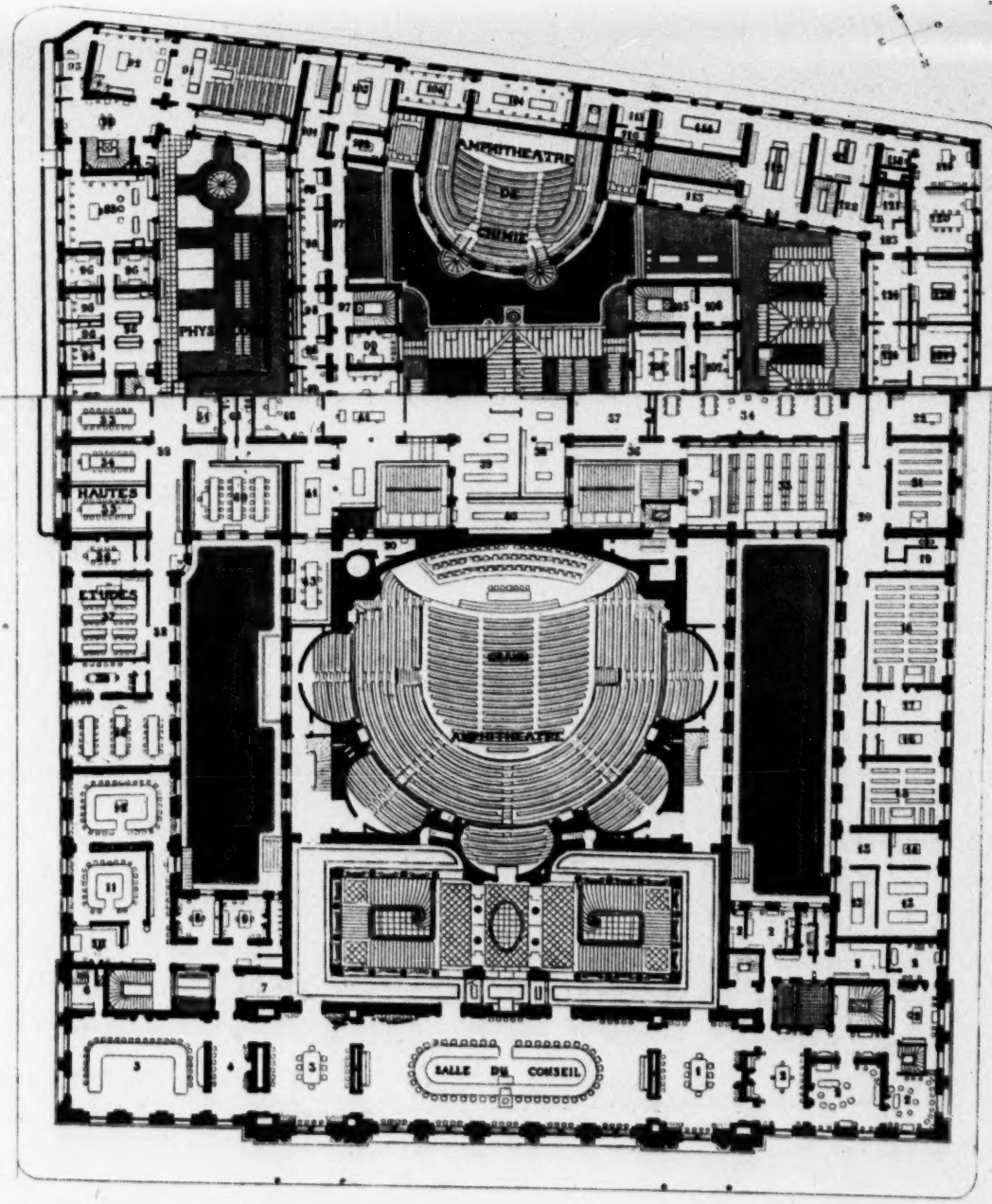

FIRST FLOOR PLAN.

THE SORBONNE.—M. Henri Paul Nénot, Architect.

Sprague & Co., Ltd., Printers, 4 & 5 East Harding St., E.C.

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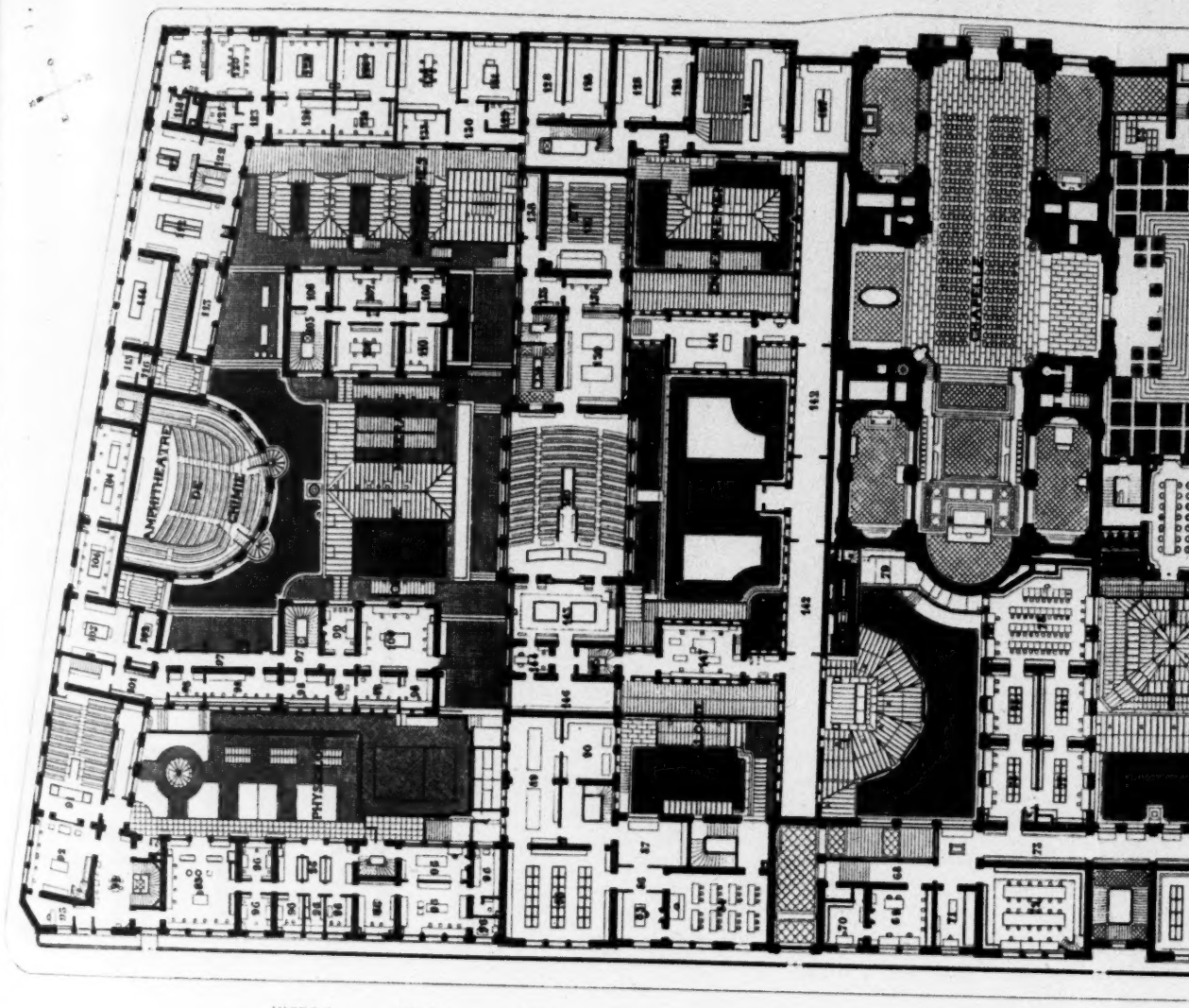

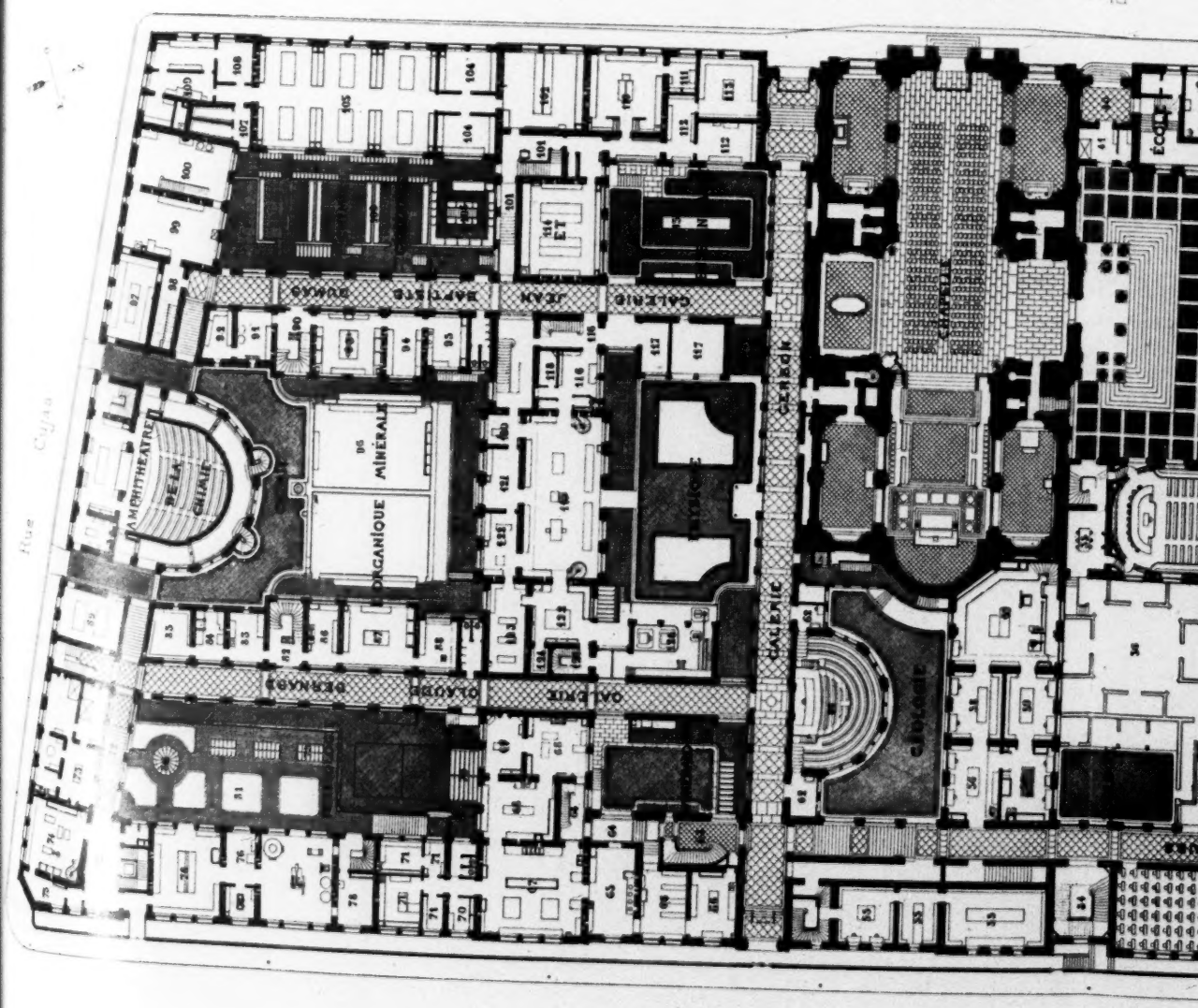

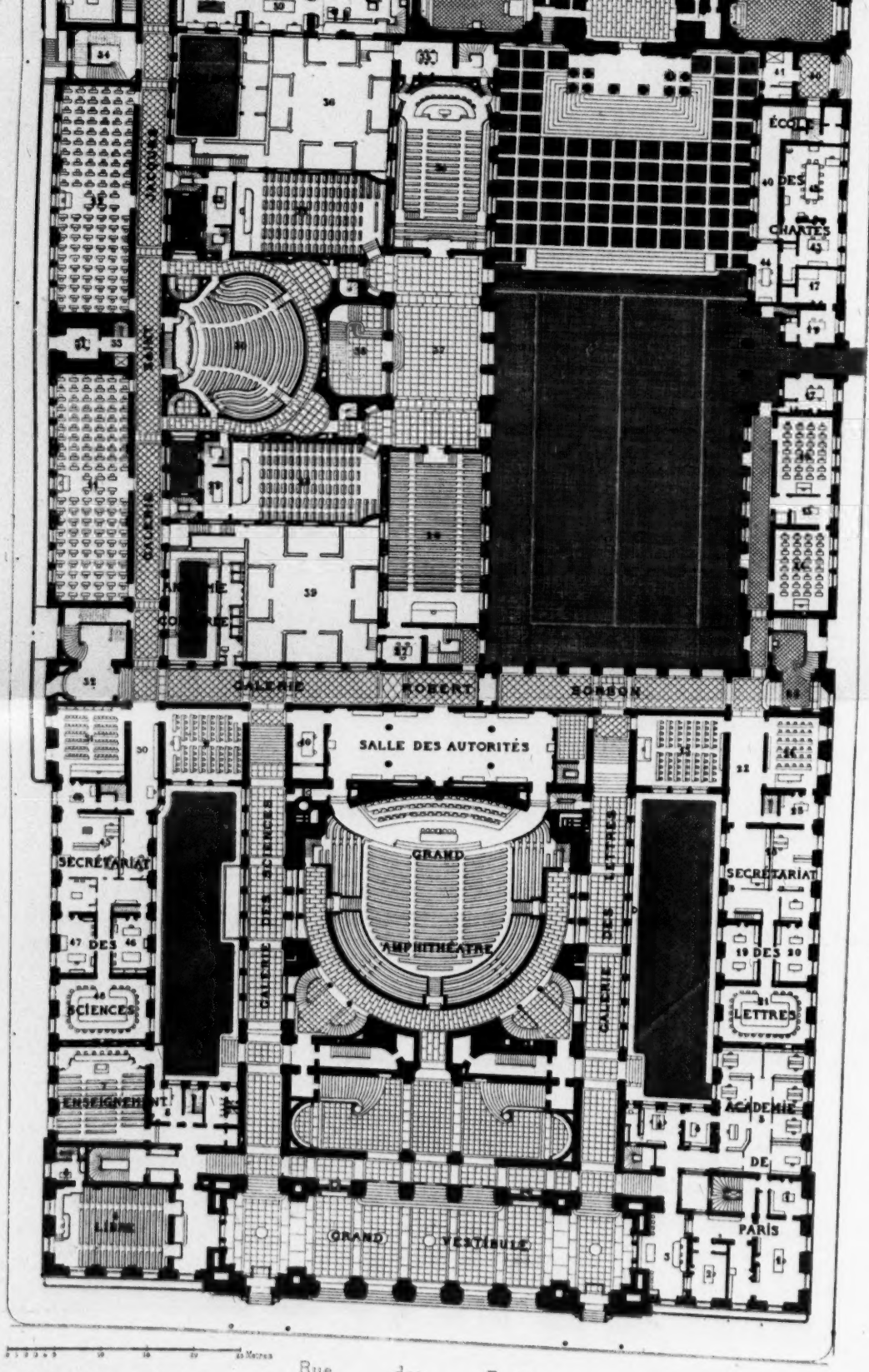

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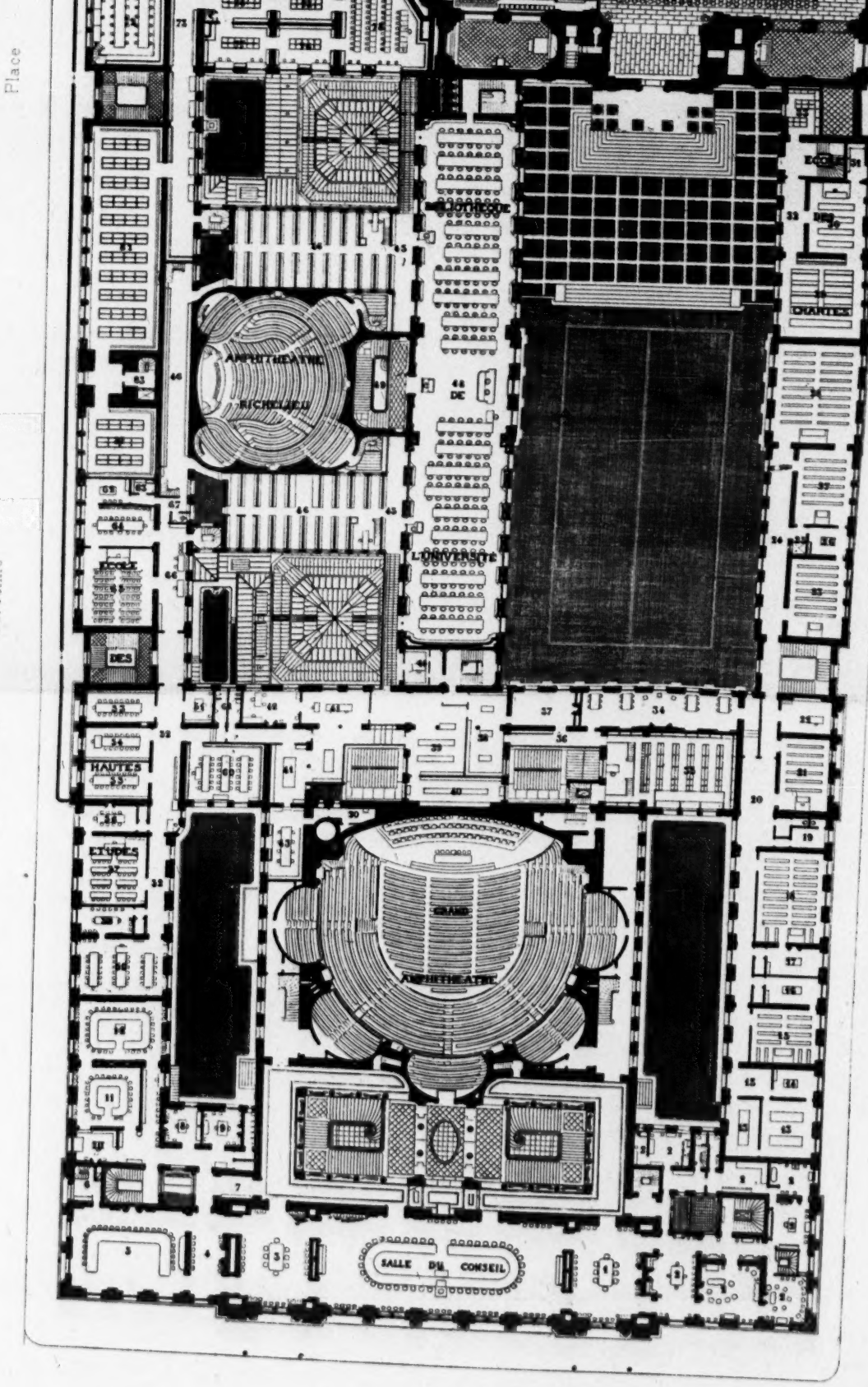

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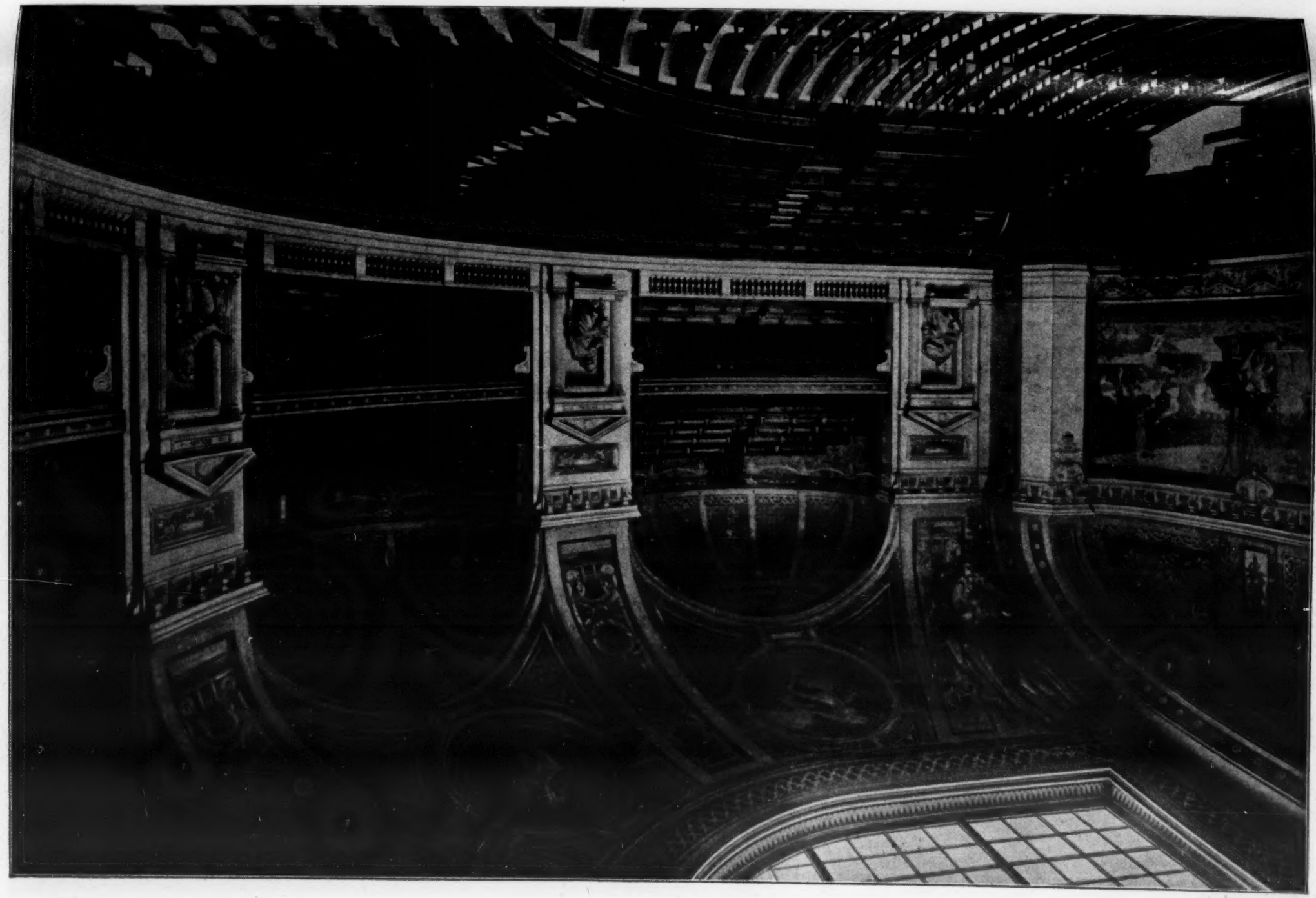

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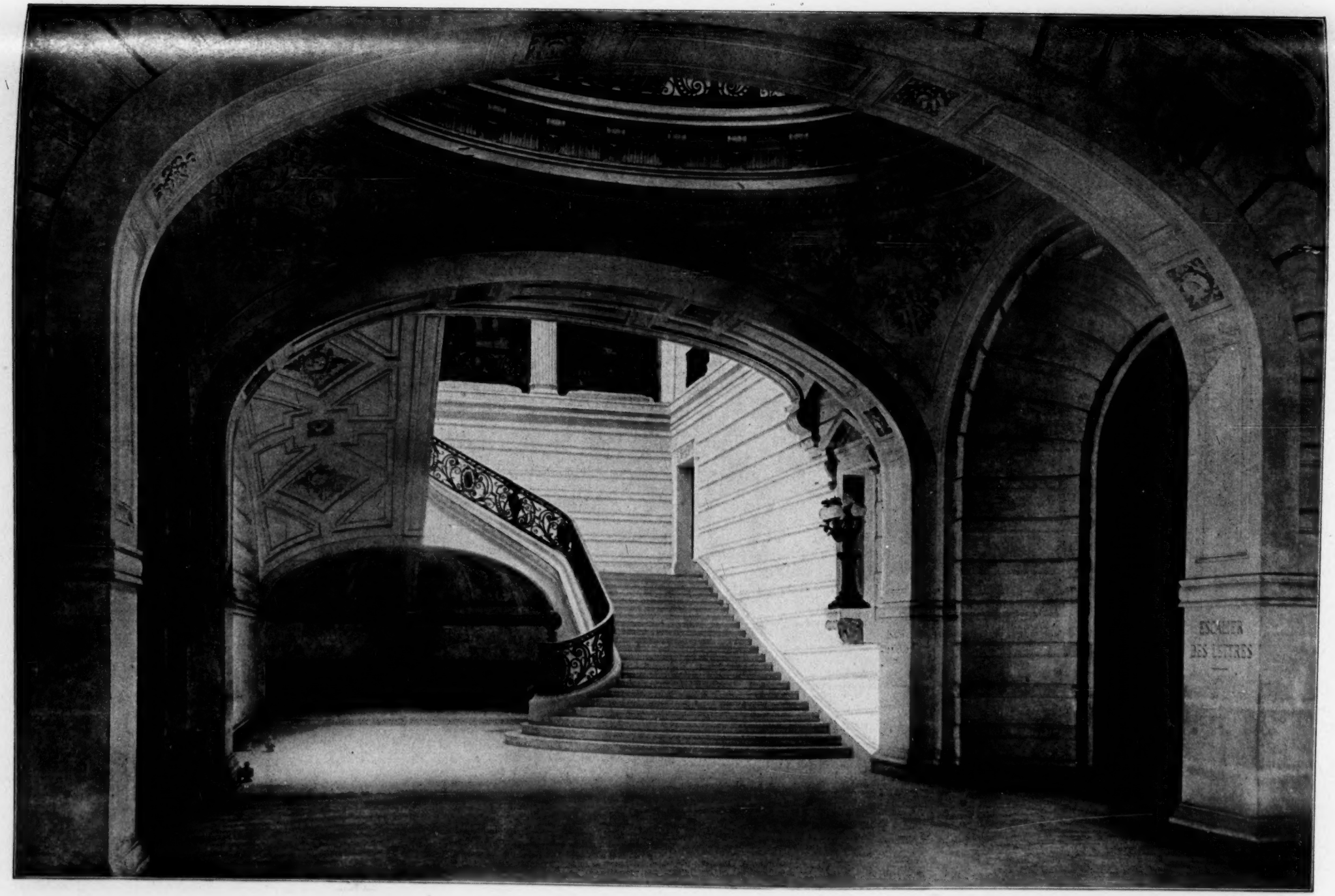

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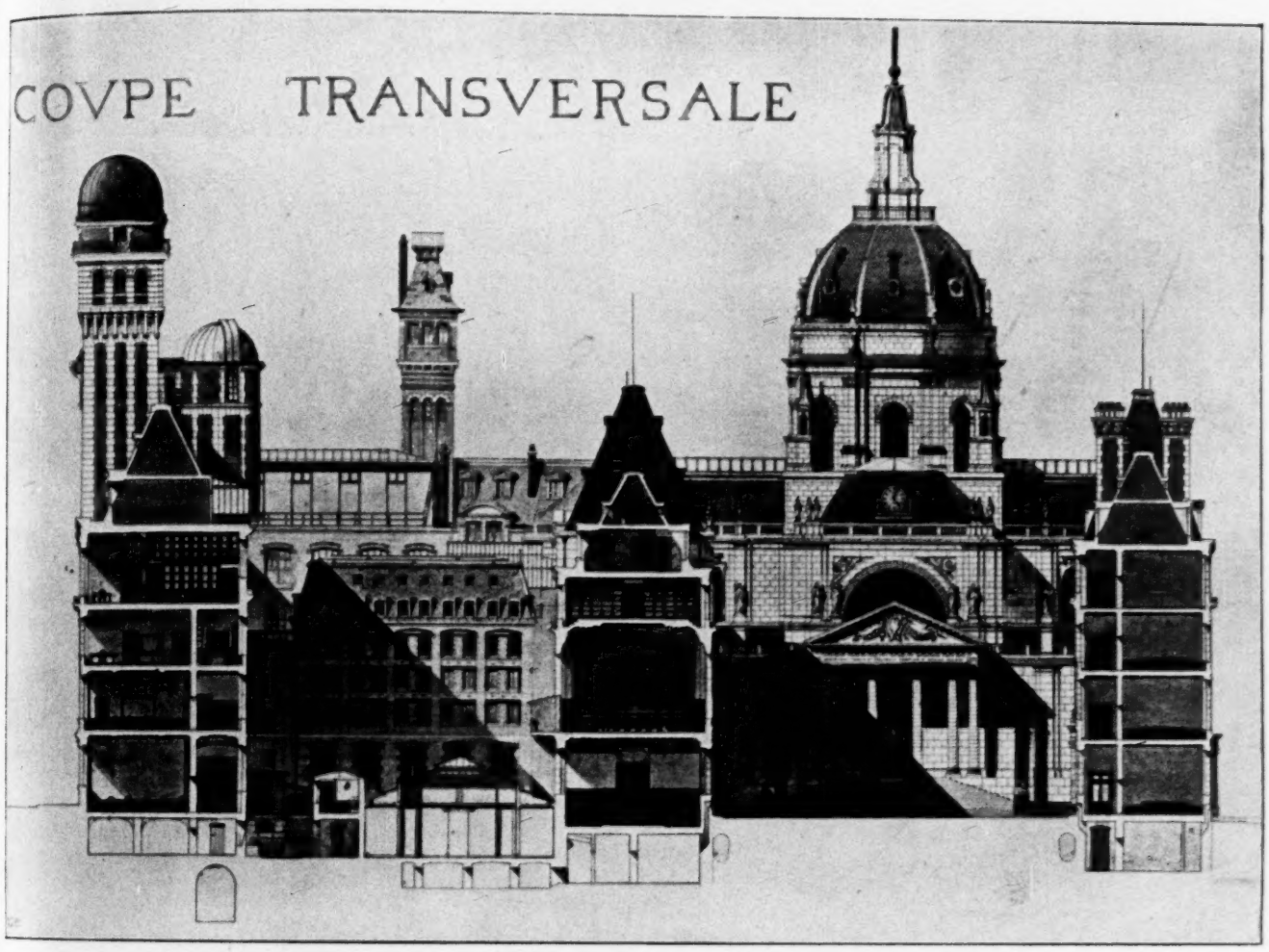

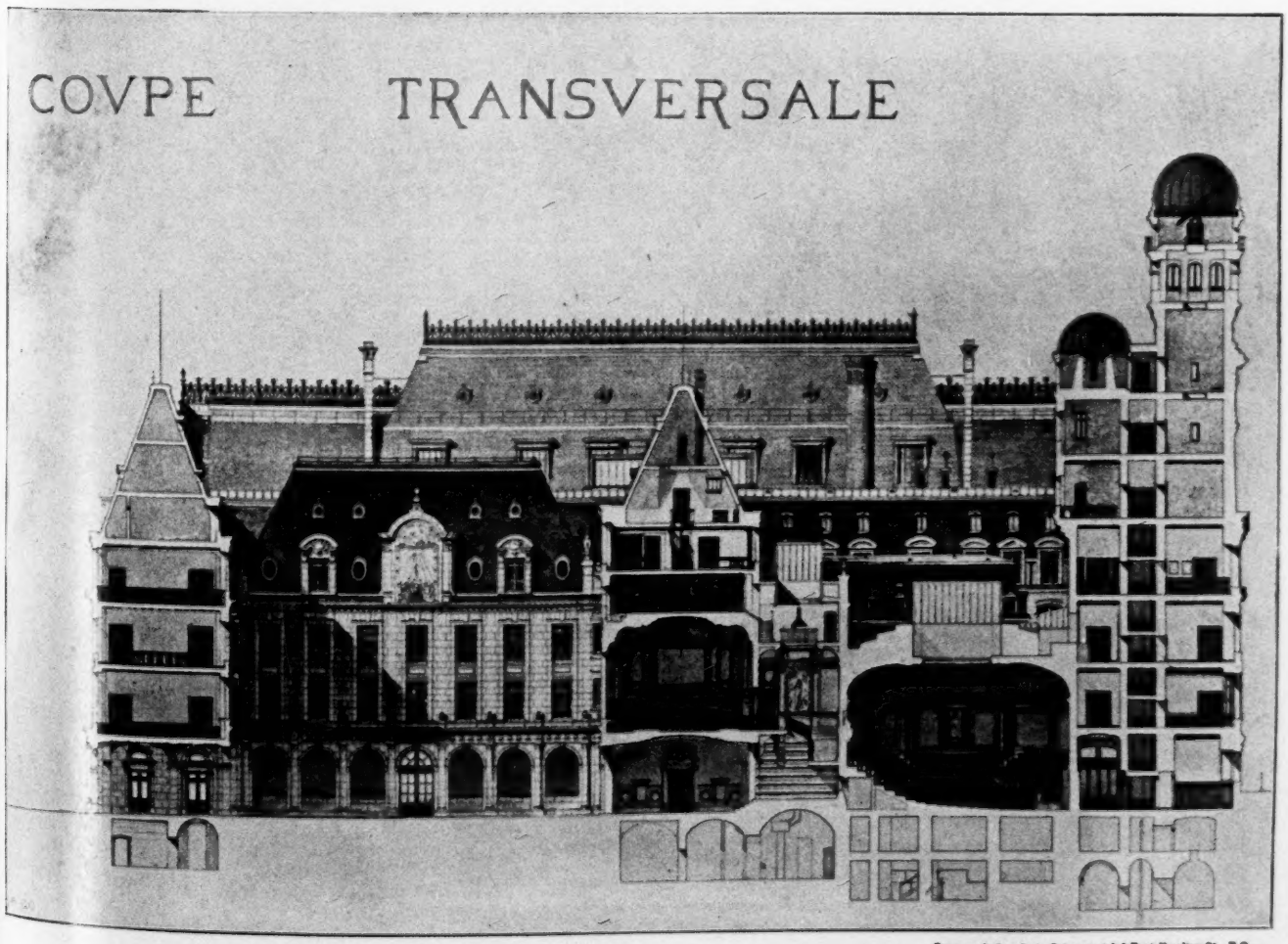

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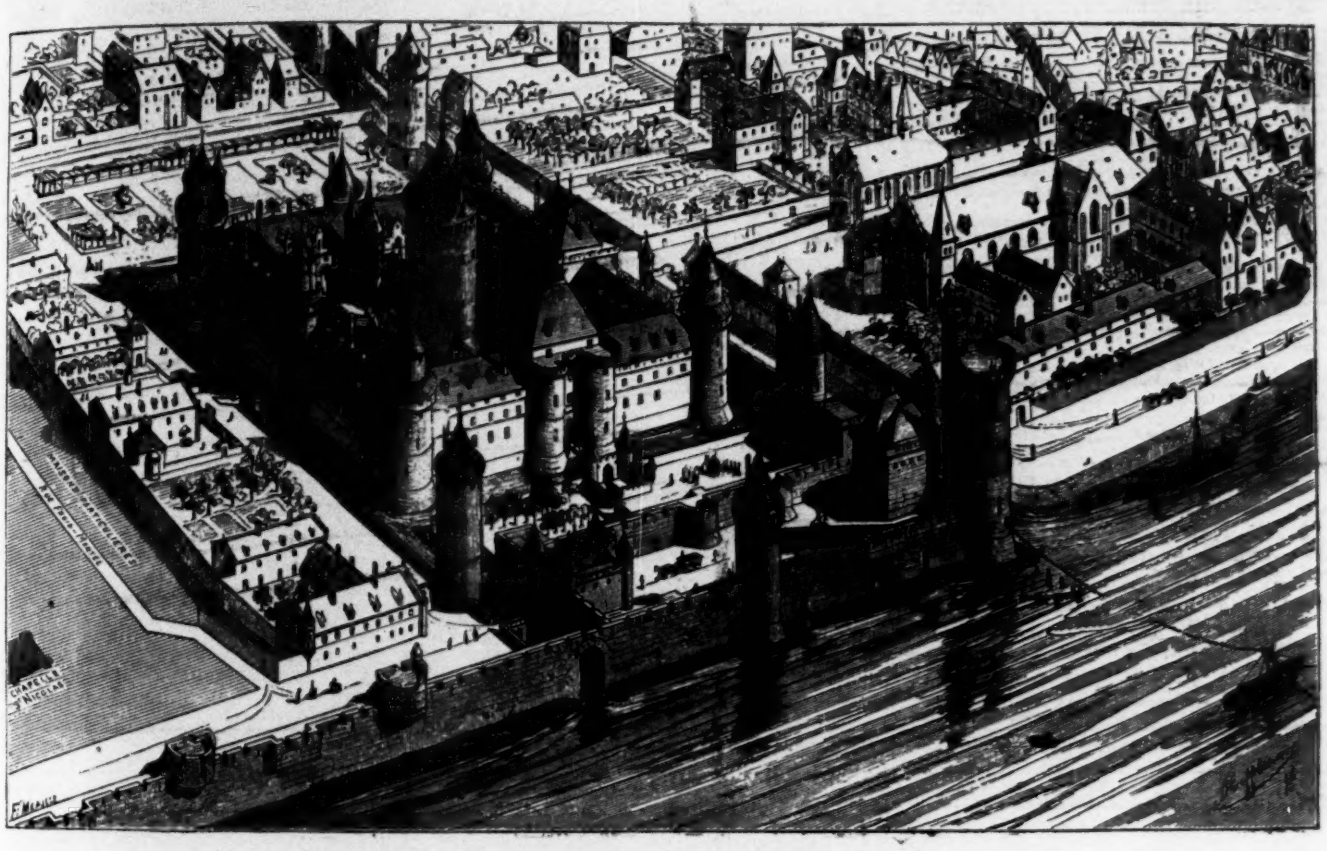
THE SORBONNE: TRANSVERSE SECTIONS.—M. HENRI PAUL NÉNOT, ARCHITECT.

MONTHLY HISTORICAL REVIEW.



The Louvre under Charles V., 1380.
(Reproduced from "Paris à Travers les Ages.")

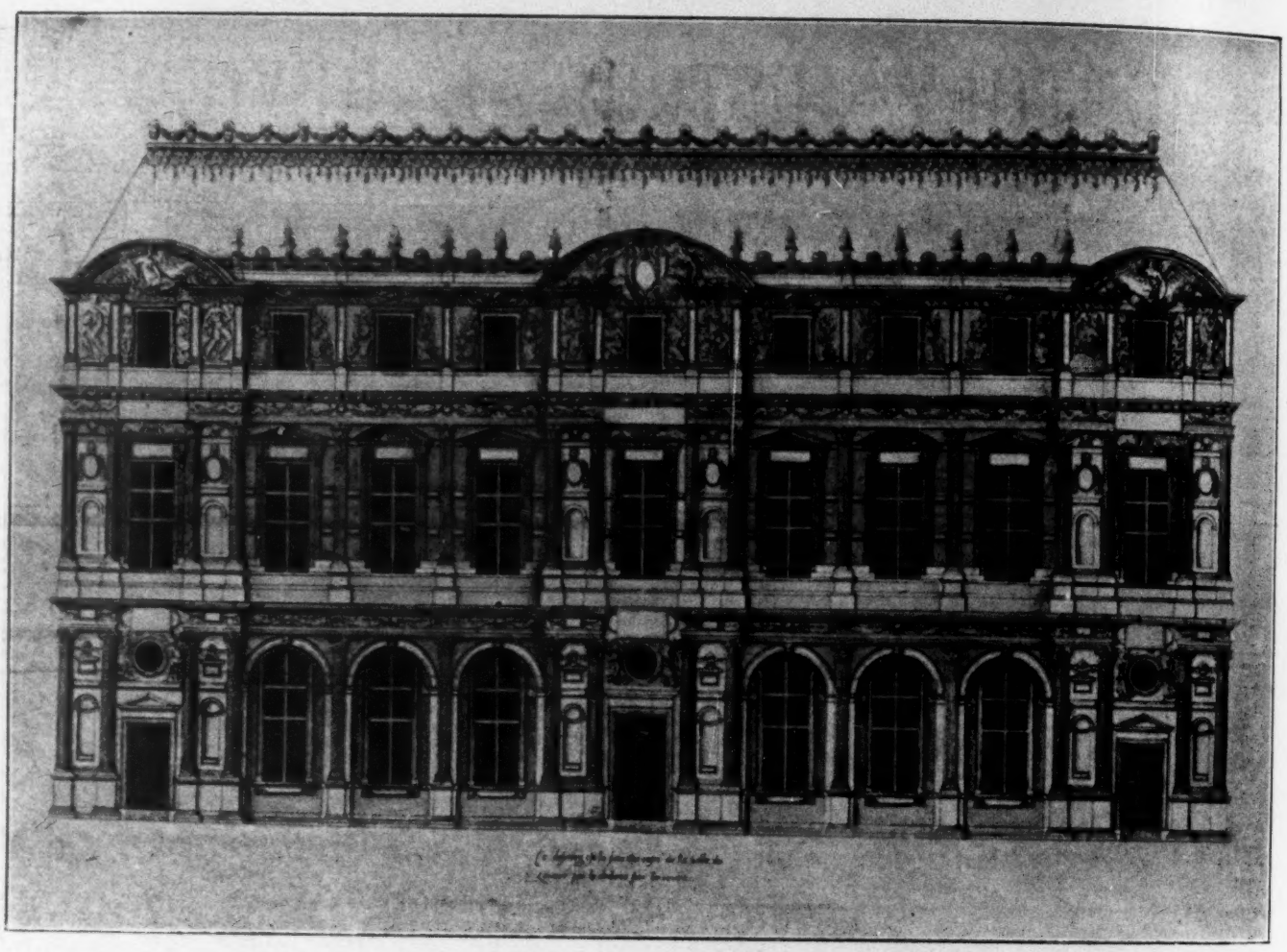
THE FRENCH ROYAL PALACES.—IV.

THE LOUVRE.

OF all the palaces of the French sovereigns four stand out from the rest as definitely official residences. The oldest is the Island Palace, which formed the subject of the last two articles. The second is the Louvre, which, founded a thousand years later, gradually assumed the position of its predecessor, as the latter became more completely identified with the law-folk, to be itself eventually superseded by Versailles, as Versailles was to be by the Tuileries. Our business is now with the Louvre. The origin of its name, which has long been in dispute, would appear to be the Saxon or Frankish "lower" or "leowar," a fortified camp, of which the barbarous Latin "lupara," with its supposed meaning of "wolfery," is merely an adaptation. Indeed, it seems that the Frankish bands who invaded Gaul in the Vth century had fixed their camp on the site afterwards selected by Philip Augustus for his castle. The surroundings had greatly changed their aspect in the intervening centuries. Under the Roman dominion the city had extended but little on the north bank. By the XIIth century the more important part of the city was on that side and was in need of defence. Philip Augustus surrounded it with a towered wall and a moat, a work of twenty years, during which time, like William the Conqueror at London, he built a royal fortress below the city at the point where the walls touched the river, but outside them (1191-1202). The object was similar in each case—to overawe the citizens of the capital, while remaining out of their reach, and to defend its approach by river. The Louvre became, like the Tower, a palace, a treasure-house, and a State prison, as well as a fortress. But it seems to have been regarded as the official feudal residence, as the old palace was the official legal one. All fiefs in the kingdom were held from "our tower of the Louvre."

If separated by an interval of several centuries, the barbarian camp and the feudal castle were yet all but identical in their arrangements, though in the latter stone walls had superseded palisading and earthworks, and many other points witnessed to a more advanced civilisation. Each consisted of a square court surrounded by a moat, with subsidiary buildings sheltered on the inside of the walls and the circular donjon or keep in the centre, with a moat of its own. The court corresponded in area and position with the south-western quarter of the present one. This first Louvre had a circular tower at each angle, and in the centre of the south and west sides. In the other two sides were gatehouses, each flanked by a pair of towers, and furnished with a drawbridge, the eastern one answering to a gate in the town walls, the southern one communicating with the river across a fortified outwork with several towers The chief of these, "Tour du Coin," stood on the south-east at the river's edge, and from it a chain used to be stretched across to the Tour de Nesle on the further bank. The accommodation in the XIIth century castle was very limited, and comprised wholly in the towers and the two "corps de logis" running along the southern and western walls, the walls on the two remaining sides being mere curtains. Beyond the castle-moat on the north lay the gardens, on the west lay several subsidiary buildings, and further still the tilting lists, where the tournaments could be watched from the towers.

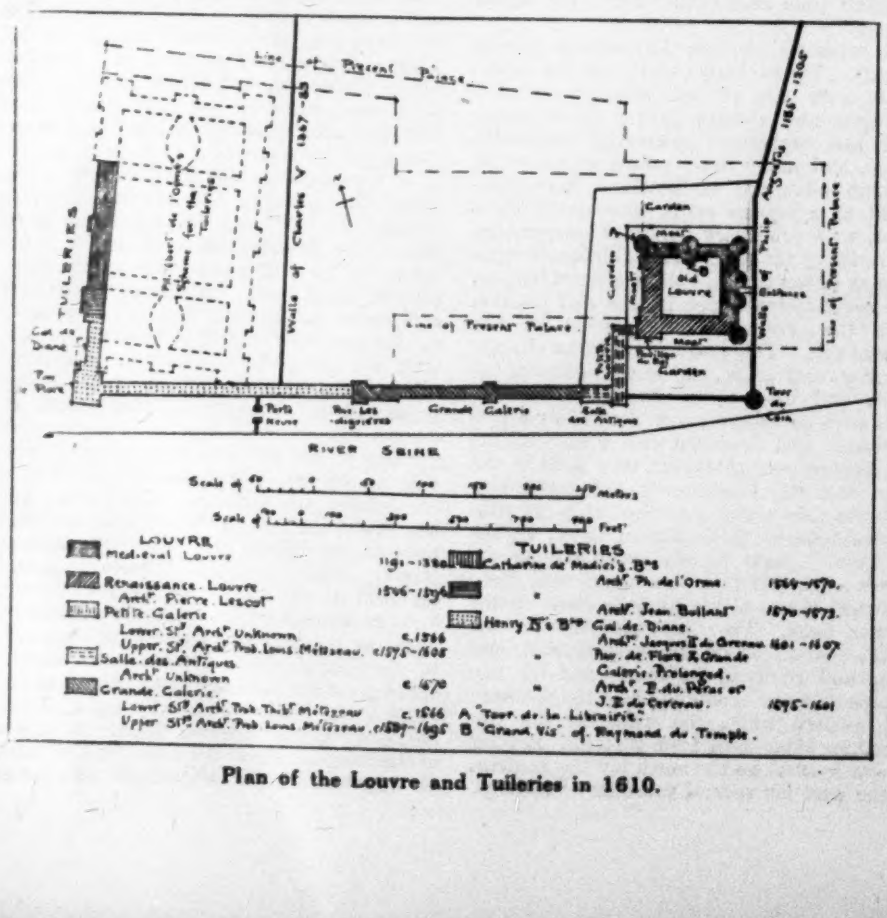
After the invasion of the Island Palace in 1357 by the populace, the dauphin Charles had betaken himself to the Louvre. In the following year the masterful popular leader, Etienne Marcel, had captured even this last refuge of royalty, and set on foot a scheme for a more extended line of fortifications of the city which should enclose the Louvre. The royal fortress would then be caught as in a trap between the old and new walls. When the Dauphin had become King, as Charles V., and had reasserted the royal power, he justified his surname of "the Wise," by his willingness to recognise accomplished facts, and himself promoted the completion of the new *enceinte*, as a work necessitated by the growth of the city. He took his precautions, however, and if he allowed the Louvre and his more recent palace of St. Paul to be surrounded, he erected the Bastille, a grim fortress with nothing of the pleasure-house about it, outside the eastern gate commanding the Rue St. Antoine, the widest street in Paris. The new walls touched the river some distance west of the Louvre near the present Pont Royal, where a gate, "Porte Neuve," survived till the end of the XVIIth century, and Charles secured the palace from attack by water by a river wall carried from this point to the Tour du Coin. At the same time he spent great sums on the improvement of the castle itself, which was greatly enlarged and beautified by his architect, Master Raymond of the Temple. Since the moats were retained no increase of the superficial area was



Court E'evation of the Louvre: Lescot's Design, after a Drawing by J. A. du Cerceau in the British Museum.

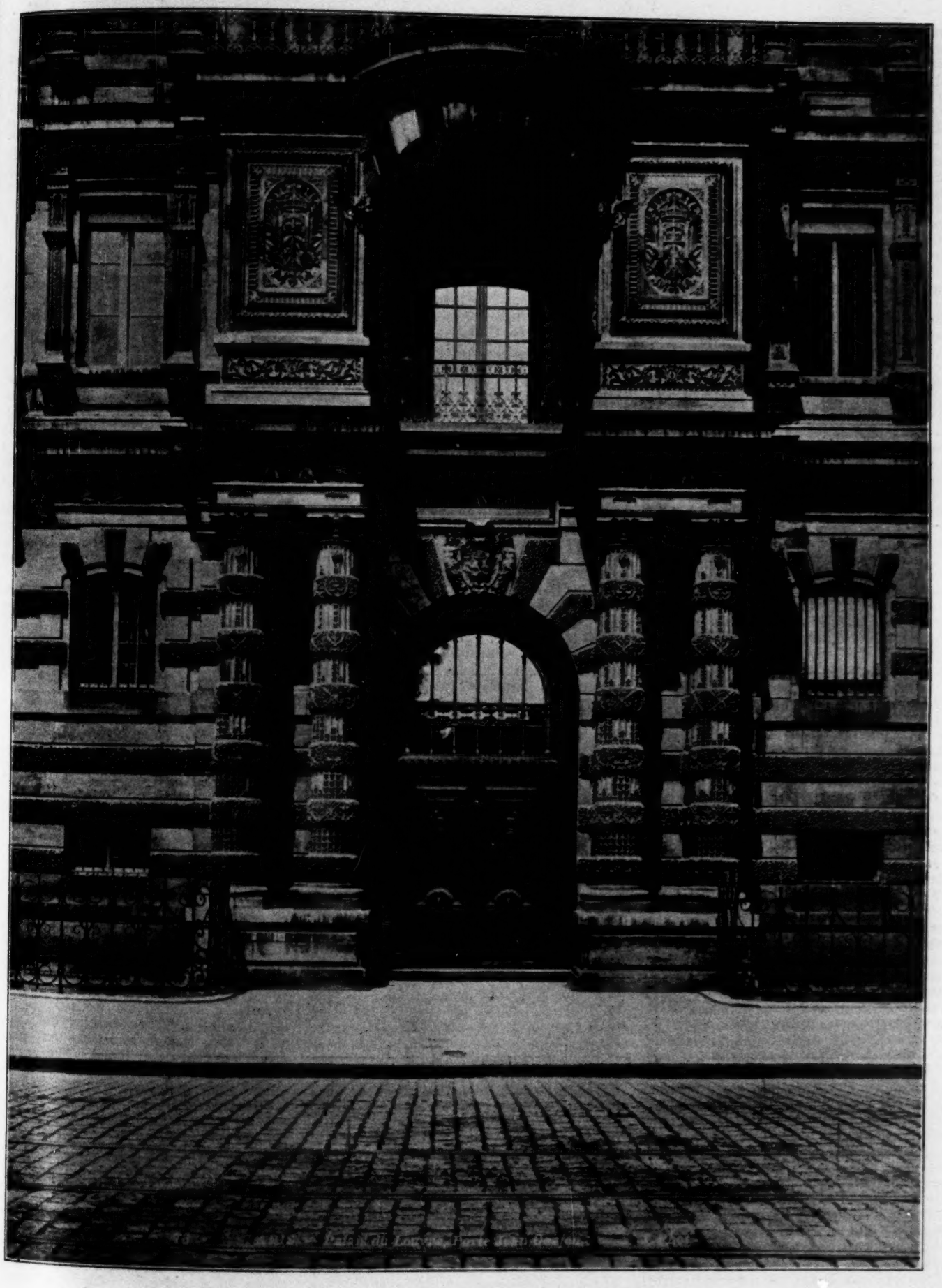
(Reproduced from "French Chateaux and Gardens of the XVIth Century.")

possible, but the existing buildings were raised and new ones erected along the north and east sides. Fresh accommodation was thus gained at the expense of the court, which must have become extremely dark. The Queen's suite was on the first floor in the southern and western wings, and the King's immediately above it. The ground floor of the west wing was occupied by the chapel and hall. These arrangements are of importance because they persisted beyond the Gothic building and largely determined those of its successor. Charles V., whose interests were more intellectual than was usual in his day, took possession of the north-west tower for his library (A on the plan). His collection, which was enormous for the times, amounted to upwards of 900 volumes, many of them rare and precious, which were housed in the three chambers contained in the Tour de la Librairie. They were placed, as the custom then was, not on shelves but on lecterns, which either stood on a revolving foot or hung with counter-weights from the beams. In the new north wing was a hall of special splendour used for certain ceremonies of an official character, whose walls up to a certain height were covered with panelling decorated with patterns in red and ornaments of wrought-tin, above which hung a set of figured tapestry so remarkable that they retained in the same position for over 200 years. Near this hall and in a tower projecting into the court was the most admired embellishment of the palace, the great spiral stair ("Grand' Vis") (B on the plan), built about 1363, which, owing to its bold plan, ingenious vaulting, and rich sculptural decoration, was regarded as one of the sights of Paris, and was regretted by the citizens when pulled down for the extensions of the palace under Richelieu.



Plan of the Louvre and Tuileries in 1610.

The old Gothic Louvre when at the height of its splendour in the last years of the XIVth century was a typical castle of mediæval romances (Fig. 1). Its crowding towers were mirrored in the waters of the moat; its pointed roofs shone gay with many coloured tiles, and its gilded vanes gleamed in the sunlight. Queens sat with their maidens in its rose arbours or paced its trellised walks. Emperors in gilded barges landed at its steps and feasted in its halls. Troops of lords and ladies rode forth a-hunting from its gates hawk on fist. But decadence was at hand. The troublous years of Charles VI. brought neglect and pillage in their train to the Louvre as to other palaces. Here in 1420 Henry V. of England held his Christmas revels with his "sweet Kate"—a bitter Kate to France in whose humiliations she so gaily took her part. Various depredations and dilapidations are laid to the charge of the English at the Louvre as elsewhere—the Regent Bedford, for instance, carried off the library—and from this time it fell into disrepute. From Charles VII. to Louis XII. inclusive it served chiefly as a prison and an arsenal, and when, after an interval of something like a century, Francis I. wished to hold his court there it was scarcely habitable.



The Louvre: "Porte Jean Goujon," Grande Galerie.

He lavished great sums from time to time in repairs, decorations, and other improvements. For instance, in 1527 the donjon was pulled down and its moat filled up to let light and air into the court and dispel its damps. Twelve years later the old castle was furbished up for the last time at great expense for the visit of the Emperor Charles V., but the experience of this occasion seems to have convinced Francis that nothing short of complete reconstruction could fit it for the requirements of a modern court. Whether or no an architectural competition was held in which the newly-arrived Italian celebrity, Serlio, was defeated by the Frenchman, Pierre Lescot, and magnanimously acknowledged his rival's superiority, it is certain that in 1546 Lescot was put in charge of the rebuilding of the Louvre, and retained the post till his death in 1578.

No radical change in the disposition of the castle, nor considerable increase in its area, was contemplated, but rather the clothing of existing arrangements in a dress in harmony with the ideas of the time, and the substitution of a clearly-set-out pleasure-house with broad pavilions, spacious, well-lit halls, and stairs in straight flights for the fortress castle with its round towers, narrow windows, dim galleries, and winding turret-stairs.

Lescot's scheme was to place projecting rectangular pavilions at each angle and high wings of similar design on three sides, with a lower wing containing the main entrance on the fourth or eastern side. All that the XVIth century accomplished was the western

and southern wings, and the intermediate pavilion, and even this stage was only reached in its last years, under Henry IV., when none of those originally connected with the building were left to see it. Francis, his son, and three grandsons had all been gathered to their fathers, the Valois had been succeeded by the Bourbons, and both the architect and his sculptor-colleague had long passed away.

Since funds were only gradually forthcoming, and the court frequently in residence, the rebuilding could only be carried out piecemeal. Hence the old arrangements often determined the new. Operations began in the west wing. Its centre was again occupied by halls—one on the court level, one above. The chapel was removed elsewhere, but its site was occupied by the "Tribunal," a raised dais at the south end of the lower hall projecting slightly into the court, as the chapel had done before it. This projection gave the key to the design. A similar projection at the north end held the stairs and a central one the doorway. In the "Pavillon du Roi," which took the place of the south-west tower, was a room on the ground floor serving as the king's dining-room, and one above it serving as his bedchamber; while the queen's apartments occupied the first floor of the south wing. Many memories are connected with this corner of the Palace. It was in the Queen's Chamber that Catharine de' Medici held her brilliant court, surrounded by that famous "flying squadron" of beautiful, and, not too scrupulous, women, and that, with her Council of Macchiavellian Italians, she planned the St. Bartholomew massacre. In another room hard by her daughter, Queen Margaret of Navarre, whose "vermilion wedding" was the occasion of the slaughter, saved M. de Léran from death by hiding him behind her bed. While the Council were assembled in the King's dining parlour and Queen Maria de' Medici sitting with her women in her apartments on the afternoon of May 14, 1610, the body of Henry IV., still bleeding from the knife of Ravaillac, was carried up from the coach in which an hour before he had driven out to visit Sully at the Arsenal, by the staircase which starts from this same angle of the court.

In the transformation of the Louvre the fortress traditions were so far respected that the surrounding moat was retained, and the outer elevations, rising above a battering rusticated basement, kept their severe and frowning aspect. But in the court and the interior all was elegance and charm. Here Lescot gave full rein to the genius of the inimitable Jean Goujon, and seldom have architecture and sculpture combined more harmoniously or to more exquisite effect. In the elevations of the court (Fig. 3) we may read the Gallic dialect of the Renaissance language in its greatest refinement. The orders and the detail, the ornament and the proportion are indeed largely borrowed from Italy, but the national bent towards vertical emphasis and varied skyline is expressed in the three projections, each surmounted by a curved pediment, and the enriched attic with its scroll-work cresting, which takes the place of the meridional cornicione.

The picturesque incident of the great Huguenot sculptor hunted from his scaffold to the cry of "Tue, tue," on St. Bartholomew's Eve, and only saved by the intervention of the art-loving Catharine, must be banished to the limbo of exploded anecdotes, for it has been clearly shown that he had fled to Bologna some ten years before and had since died.

Internally Goujon worked chiefly in the lower hall, called "Salle des Caryatides" from the noble female forms to which he assigned the task of carrying the minstrels' gallery with effortless strength. The decoration of this apartment was not completed till the restoration by Percier and Fontaine for Napoleon in 1806, and it is even uncertain at what period the vaulting was put in position. All trace of the original decoration of the upper hall, which had a coved wooden ceiling with carved ribs and rosettes has long since disappeared, but the walnut panelling of the King's Chamber, rich with carving and gilding, and bearing the monogram and crescents of Henry II. and Diane de Poitiers, can now be seen in one of the rooms of the later eastern wing. Meanwhile the old buildings to the east and north of the court remained intact till the middle of the XVIIth century; and even in the rebuilt western block the massive outer wall was to some extent preserved, and in its thickness a spiral stair which formerly gave access from the royal apartments to the chapel still survives.

The desire for a cool open-air walk in summer was gratified in Italian fashion under Catharine de' Medici's rule, about 1566, by the erection of a flat-roofed arcaded portico running southward to the river from the south-west angle of the palace. This gallery, known as the "Petite Galerie," was tastefully treated with delicate rustication and incrustations of black marble as well as by figures in relief representing Fame. It was approached from the King's Pavilion by a covered bridge thrown across the moat. At its other end it touched a building containing the apparatus for regulating the waters of the moat—"Maison de l'Engin"—which however seems to have been replaced immediately after, if not before, by a new one serving as a museum of antique sculpture, "Salle des Antiques," and built in a style conforming neither with the Petite Galerie nor with the contemporary Grande Galerie. Catharine de' Medici was at this time much occupied with her new palace at the Tuileries, a little further west, just outside Charles V.'s town walls. Since the same king's river wall made a natural means of communication between the palaces, Catharine determined to make it worthy of them. Her architect for this work, who was perhaps Thibaut Métezeau, utilised the old materials and foundations, and began a length of covered and terraced gallery decorated with much exquisite sculpture, and a rusticated order of coupled pilasters of great richness. The abandonment of the Tuileries in 1572 involved that of this "Grande Galerie," which was only resumed some twenty years later by Henry IV. Incomplete as it was, it stood Henry III. in good stead in 1588, when he found himself barricaded by the mob in the Louvre, since it enabled him to reach the Porte Neuve, and thence to escape into the country on a horse from the Tuileries stables. Henry IV., under whom the royal building works entered on a very active phase, adopted the more ambitious scheme of joining the two palaces by a closed gallery. He divided his work among several architects. Louis Métezeau, son of Thibaut, who seems to have been in charge of the portion between the Louvre and the Porte Neuve, brought the heterogeneous buildings already erected on the river front into a symmetrical scheme. At one end he placed an upper storey on the "Petite Galerie," containing a gallery decorated internally with portraits of the kings of France, and known as "Galerie des Rois," and at the other he placed a feature to match this—"Pavillon Lesdiguières"—and a second to match the "Salle des Antiques," while the feature bearing the misleading name of "Porte Jean Goujon" (Fig. 4) formed the centre. The further extensions westward may be regarded as belonging to the Tuileries. The "Grande Galerie" was at a lower level than the "Petite." Consequently a mezzanine had to be inserted above it to make it possible to carry the upper gallery through on a level. This "piano nobile" received a pilaster treatment and was surmounted by a long line of pediments alternately curved and pointed.

Henry IV.'s assassination brought all building works, as well as much else, to a standstill. During Maria de' Medici's weak and troubled regency no attempt was made even to complete Lescot's scheme, and still less the greater one, drawn up by Thibaut Métezeau, and still in part visible in a fresco in the Galerie des Cerfs at Fontainebleau, for joining the Louvre and Tuileries. This was to have been done by a northern, as well as by a southern gallery, enclosing between them a series of courts and gardens. The smaller task was never accomplished, being superseded by an ambitious project under Louis XIII.; the greater had to wait till the middle of the XIXth century for its achievement, and by a strange fatality was only completed a few years before the destruction of the Tuileries deprived it of its *raison d'être*.

MONUMENTAL BRASSES.

Part II.—Ecclesiastical Brasses.

WE can show but little development in the vestments of the clergy, for their form had become fixed long before the advent of memorial brasses. They are, none the less, of considerable interest and beauty, and include some of the noblest work of the kind we possess.

The two great brasses at Balsham, Cambridge (about 8 ft. by 5 ft.), with their magnificent canopies, are among the finest in England, if we exclude those at King's Lynn, which cannot rightly be brought within the limits of this article, being of foreign workmanship.

The most frequent form of ecclesiastical brasses are those showing the Mass vestments. Robert Scarclyf (Fig. 5), Rector of Shere, 1412, is a typical example of a good period.

The amice, like a handkerchief with an

Fig. 5.

apparel of embroidered work, is fastened round the neck. The chasuble is quite plain, as is usual, though sometimes an embroidered one may be found. The maniple was worn in a loop over the left arm. The other vestments are:—

The stole, a purely eucharistic vestment, is probably known to all, as it is used to-day by many clergy who do not wear the full Mass vestments. It has probably become confounded with the tippet (a scarf worn when preaching, which was always black).

The alb, which took the place of the modern surplice was, as can be seen, ornamented with embroidered apparels on the cuffs and at the foot. It was usually white, though coloured albs did exist. The tonsure on the priests' head is plainly visible.

The total length of figure and inscription is 23 in. This is about the average size of these brasses, which are, on the whole, of rather small dimensions.

Those clergy who are portrayed in their copes belong to a group which includes some of the finest brasses in England.

Many of these have magnificent canopies, such as the two at Balsham. That of Walter Hewke (Fig. 6), D.C.L., 1517, who lies buried in the Chapel of Trinity Hall, Cambridge, has no canopy, but is otherwise an extremely fine example. Though late, the lines and engraving are good. The head has had to be restored, but the inscription has luckily

Fig. 6.

Fig. 7.

Fig. 8.

escaped the destructive hand of the Puritans. It is above the head, and reads, "Of your charity pray for the soul * * * * *" The brass was engraved in the lifetime of Hewke, and the date is only partly filled in, i.e., 15—. He wears a doctor's cap, and about his shoulders the fur almuce, with the tails showing in front. Probably the tippet already mentioned developed from these. The cope itself is magnificent. On the orphreys are shown the twelve apostles, and on the morse, Our Lord in Glory. The length of the whole brass is 6 ft. 4 in., the figure alone being 5 ft.

We must now consider the episcopal brasses. Of these there still exist eighteen, showing the vestments worn, for the mitred abbots used practically the same vestments as the bishops.

The example given here is Thos. Goodrake (Fig. 7). Bishop, and formerly Abbot, of Ely, 1554. He was Abbot of Ely till 1533, when he surrendered the Abbey to Henry VIII., and remained Bishop of Ely till his death in 1554.

He helped to produce the Bishops' Bible, and wrote "My duty towards my neighbour" for the Catechism. He was Chancellor in 1551, and is depicted holding the Great Seal. The book is either the Bible or the Prayer Book.

He seems to have been of a rather time-serving disposition, and the fact that, though an ardent Reformer, he is arrayed in full canonicals, is probably to be explained by the accession of Mary to the throne in 1553. Apart from this, there was ever a strong party in favour of the retention of the old vestments. The brass is late, and not over good, as will be noticed.

There is far too much detail recorded, and the attempt to show the folds is unsatisfactory. On the head is worn a jewelled mitre, but the "infulæ" (two ribbons depending from its back) cannot be seen. In the brass of John Bowthe at East Horley, these are visible.

The crozier is very elaborate, and shows the vexillum, or scarf, attached to it. He wears a chasuble (1) richly ornamented, then a dalmatic (2) even more ornate, and a fairly plain tunicle (3). The alb has a very fine apparel at its foot. The remaining garments are the ordinary Mass vestments. The symbols of the four Evangelists are placed in Tudor roses at each corner of the stone.

The canopy is lost, but the length of the figure is 5 ft.

We must now pause for a momentary glance at the great civilian group. Many examples of these exist, but we will cite only that of William Coke (Fig. 8) and his wife Alice, with their two sons and three daughters (1553) at Milton, Cambridge. He was a judge of the King's Bench and is arrayed in his robes, worn over the civilian costume of that period. His shield is seen above. His lady is attired in a flowing gown, puffed and slashed at the shoulders, from which depend long false sleeves. Each has a label issuing from the mouth. Their children are, as is usually the custom, depicted below them. The Judge's purse is visible, attached to his girdle at ×.

The border inscription has the four Evangelical symbols at its corners, and the top line, which now is missing, existed in Blomefield's time. It began, "Orate pro anima." The height of the entire brass is 6 ft., and that of the principal figures 2 ft. 11 in. A magnifying glass will greatly assist the reader in studying this illustration.

Threatened Mediæval Buildings.

The condition of the beautiful Great Hall of Eltham Palace, intimately connected with the English Royal House from early times to the great Civil War, is giving cause for anxiety. It is, however, not too late to save it, and it is to be hoped that measures will be taken while it is yet time to carry out the necessary repairs to arrest the work of decay.

In the case of Shap Abbey the work of destruction is not being wrought by time and weather alone, as at Eltham, but, unfortunately, according to a letter which appeared in the *Times* of October 6 by the present owner, Lord Lonsdale, who, it is alleged, has not only refused the offer of the Cumberland and Westmorland Antiquarian Society to expend 150*l.* in repairs, sufficient to save the half ruinous tower and other portions, but has actually within the last summer removed eighty cartloads of masonry, including portions of the nave piers, to another part of his grounds. Such conduct cannot be too strongly deplored and deprecated, and gives a rude awakening to those who had hoped that the conception of ownership of interesting relics of the past as a trusteeship for posterity was becoming a general one.

It is on such grounds that we would appeal to the authorities of Llangollen to approach with the greatest caution the question of the proposed widening of their celebrated and picturesque stone bridge. The little town has been so greatly, and so unwisely, modernised of late years, that it retains but little of the charm admired by Scott, Browning, Ruskin, Turner, and other writers and painters. Its beautiful site, indeed, remains, and so far, at least, its bridge, one of the Seven Wonders of Wales, built in the XIVth century by John Trevor, Bishop of St. Asaph. It was already widened in 1873, and could hardly be further widened without irreparable loss of character. Moreover, it does not appear that such further widening is necessary, since the main lines of traffic do not pass over it.

Sta Sophia.

It is a pleasure to turn from such fears and regrets to cases where the powers that be are alive to the responsibility entailed by the charge of ancient monuments. If the new Turkish *régime* has shown less than the reverence due to the walls of Constantinople, as we had occasion to point out in our issue of August 20 it appears in a more favourable light in its attitude to Sta Sophia.

Signor Luigi Marangoni, the well-known architect and engineer, who has been entrusted with the task of strengthening and restoring the basilica of St. Mark, has recently visited Constantinople at the request of the Ottoman Government, and with the consent of Italy, to examine the condition of Sta Sophia. Three weeks' study of the fabric led him to the conclusion that, contrary to what was feared, the dangers threatening it are more static than geological; nor does he consider them as grave as was supposed, but believes that certain radical restoration work, if promptly and thoroughly executed, will guarantee its preservation. Signor Marangoni will present a report on the subject to both the Ottoman and the Italian Governments, after which it is believed that the former will begin at once to carry out his suggestions.

Hampton Court.

The works undertaken at Hampton Court have now been finished, and the hoarding removed. The entrance front of the Tudor palace has been restored to something approaching its appearance in the middle of the XVIth century. In Wolsey's time it was surrounded by a moat fed by a branch of the River Colne, which was diverted for the purpose, and was entered by means of a drawbridge. In 1535 Henry replaced this by a stone bridge of four arches, with a battlemented parapet, and pinnacle shafts carrying heraldic beasts. It was begun for Anne Boleyn, but not finished till she had been superseded; her leopard was therefore transformed into Jane Seymour's panther by the alteration of its tail.

It was discovered in the seventies of the last century that the moat and bridge had not been entirely destroyed when the court was levelled, but it was not till the present year that it was decided to restore them. The retaining wall of the moat and the bridge to the crown of the arches were then found almost intact. In the light of the very detailed building accounts preserved in the Record Office, and by reusing the considerable quantities of the original brick and stone found in the moat, it has been possible to reconstruct the Henry VIII. Bridge, which now only lacks its beasts, a deficiency soon to be supplied. Instead of water its arches now span a stretch of level turf.

Another matter of kindred interest is the recent discovery of another of the set of seven panels of tapestry representing the Deadly Sins, of which three hang in the Hall of Hampton Court. The panel, which is 13 ft. square, and an accompanying length of frieze will shortly be offered for sale by Messrs. Puttick & Simpson, and it is greatly to be hoped that it will not be allowed to leave the country.

Glastonbury Abbey. MR. BLIGH BOND has made some interesting discoveries during his excavations of the ruins of Glastonbury Abbey, and has had the opportunity of consulting an important manuscript concerning Glastonbury owned by a gentleman at Weymouth. This is the diary of a local schoolmaster, one John Cannon, born at Meare, near Glastonbury, in 1684. The author recorded in this diary that the Abbey had been reputed to be 638 ft. long, including the chapels of St. Joseph and St. Dunstan. The utmost length hitherto attained, including the Edgar Chapel, is 580 ft. internally. The chapel of St. Joseph is that which is still standing, and which is properly called St. Mary's Chapel, but nothing was known of the situation of St. Dunstan's Chapel, and the knowledge of it is confined to one or two brief allusions in the record of Abbots' benefactions.

As it appeared improbable that any important extension of the building to the east of the existing ruins would be found, Mr. Bond measured a length due westward from St. Mary's Chapel and came upon the foundations of an old building precisely at the point indicated by the manuscript. These have been opened up to some extent, and appear to indicate a small rectangular building, but its dimensions are not yet known. The soil is at this point very deep, and the excavations will be a matter of some expense and time.

Holyrood Palace. THE *Scotsman* of October 7 published a detailed account of the recent works at Holyrood Palace. As carried out under Mr. Oldrieve, Architect to H.M. Board of Works at Edinburgh, they have constituted a preservation and not a restoration. Consequently no attempt has been made to restore, as has been suggested, the old Abbey Port or Gatehouse, pulled down in the XVIIIth century, of which but few vestiges remain. The most important section has been the putting of the ruins of the Chapel Royal in a sound structural condition. The first operation was the removal of the accumulations of dirt which obscured the surface and detail; the second, the strengthening of the structure by means of the cement grouting machine and baryta spray. New stones have been inserted only where indispensable for safety. The exposed tops of walls have been covered with asphalt invisible from below. The unskilled patching of an earlier period with wood and plaster has been cleared away. The aggressive blue slating of the aisle roof has been replaced by soft grey Caithness slates. Some 60 tons of rubbish which had accumulated beneath this roof on the top of the vaults has been cleared away, after being carefully searched. In it were found fragments of stained glass, some old coins, and a beautiful mediæval key.

In the course of these works several interesting discoveries have been made. The plan and part of the flagging of the cloisters have been uncovered. A pointed opening in the present east wall—really the east wall of the nave—was found and opened up. It seems to have communicated with the triforium, and commanded a view of the altar. The condemned doorway in the south-east angle of the church has also been cleared, and, behind the masonry of Charles II.'s time, the original nail-studded oak door was found, through which the murderers of Rizzio entered the church to reach the spiral staircase, which leads up to Mary's and Darnley's rooms.

Pending the modernisation of the suites in the southern and eastern wings of the palace, which are of little historical interest, in order to fit them for occasional occupation by the King and Queen, the old Royal apartments are being judiciously renovated, principally by means of a thorough cleaning, and the removal of accumulations of paint and plaster. The furniture, tapestries, and pictures of the palace have also undergone a process of careful repair, while interesting objects have been routed out from cellars and attics and restored to the historical rooms open to the public. Hitherto an impression of gloom and mustiness was the chief one carried away by the visitor. Now, it is said, all this has been dispelled, and he has before him a vivid picture of the court life of the past.

Clifford's Inn. THE announcement is made that the fate of Clifford's Inn, which has so long been trembling in the balance, is settled, and it is a matter of congratulation that at least a portion of this curious and historic corner of Old London is not to disappear. The Inn first emerges from obscurity as the London residence of the Barons de Clifford, ancestors of the Earls of Cumberland, and some vestiges of the XIVth-century buildings are still to be seen. In 1618 it became an Inn of Chancery, and a dependency of the Inner Temple, on being purchased by a society which took its name, consisting of a principal and sixteen members, known as "Rules." The hall was rebuilt at that period in the style which then passed for Gothic. The houses in the adjacent courts mostly date from the later XVIIth century, and from one of them (No. 3, South-court) came the beautiful panelled room now in the Victoria and Albert Museum.

The Inn dissolved membership a few years ago, and disposed of the property to Mr. W. Willett, reserving a portion for a proposed school of law. Since then its chief title to fame is to have been the meeting-place of the Ancient Society of Cogers and of the Art Workers' Guild. By the generosity of Sir Henry Pellatt the Society of Knights Batchelor has now been enabled to purchase the Hall and adjoining houses. It is stated that Mr. Willett has arranged to retain considerable portions of the Inn buildings, as well as its gardens, in his scheme for the development of the remaining property, and that Sir Aston Webb has made designs for remodelling South-court to harmonise with the architecture of the Hall.

Glasgow and Wells Cathedrals. SOME points of interest arise out of necessary works now being carried out at Glasgow and Wells Cathedrals. At the former the roof of the choir, which was in bad condition, has been partly uncovered and the sham vaulting of 1824 removed. The fine XIIIth-century oak framing now revealed has been so badly mauled by alterations at various times that it is a matter of wonder that it has continued to hold together. It is hoped that the authorities will dispose of sufficient funds to enable them to put the timberwork in thorough repair and reinstate the lost portions, including the intermediates, and also the wood lining, the line of which is marked by a moulding over the four windows in the east gable, and is quite different from that of either of the plaster ceilings which have succeeded it.

At Wells the Dean and Chapter are issuing an appeal for funds to meet the expenditure which, according to Sir Charles Nicholson's report, is urgently needed on the central tower. An upper story pierced by twenty-four long lancet lights was added in the early XIVth century to the XIIth-century structure. Some years later the lights were built up so as to form panels, and a pair of statues added on the face of each of the angle pinnacles. The stone was selected from an inferior bed, and not bonded into the earlier work, but scribed to it and secured by iron cramps, with the result that it is now badly split and generally insecure. The work now in hand consists in removing the offending cramps and substituting sound stones, properly bonded in, for the defective ones.

Recent Excavations at Corstopitum. THIS is the fifth year of excavation work at Corstopitum, near Corbridge-on-Tyne, and the results have been somewhat anticipated by the disclosures of preceding years. The portion of the site dealt with this year has been the east of the town site, and the estimate of its extent in that direction has been confirmed, the old road to and from the north having been laid open, disclosing that no buildings of any importance lay eastward. The most interesting work of the present season has been the uncovering of the eastern half of the big central building of the town. This has been described as the "forum" or market-place, but the experts are still not certain whether it was that or only large Government stores. The western half had been found to be divided into comparatively small cells or shops. The eastern portion now proves to have been one large court, forming half of a building which was a square with a side of 220 ft. A main entrance into the central court has been disclosed. The east wall is standing for almost its full length one course above the foundations, and for a considerable distance two courses. Inside this uncovered court have been found traces of a later IIIrd-century building, the nature of which has not been determined.

A finely-carved altar has been unearthed with an inscription to Jupiter Dolichenus, who is said to have been regarded as the special patron of miners. The altar had been used to form part of the kerb of a road constructed about A.D. 360.

Open-Air Museums. THE appeal for open-air museums which appeared in the August number of *World's Work*, and which we noticed at the time, has aroused widespread interest. It has been followed up in the October number by the publication of selections from the interesting correspondence to which it has given rise, together with illustrations of existing examples of such museums. These, as it will be remembered, consist of ancient structures removed, where necessary, to a public park, and fitted with the furniture, utensils, and other appointments of their period. This method of presentment obviously affords a more vivid, and therefore a more instructive, picture of the life of bygone ages than can be derived from a museum of the ordinary type, and such a scheme would increase tenfold the possibilities of saving interesting relics of the past which would otherwise infallibly be lost or destroyed. The examples illustrated by our contemporary, one of which we reproduce, are drawn from the admirable open-air museums at Skansen, near Stockholm and Lyngby, near Copenhagen.

An approximation to the idea has, of course, frequently been put into execution in the past, where archæological collections have been housed in a building of some antiquity and architectural interest, as, for instance, at Lewes and Aylesbury, and quite recently in the transference of the Hawick Museum to Wilton Lodge, a historic house, of many memories from William Wallace to Warren Hastings. But the systematic attempt to revive the internal appearance of a house of some definite period has hardly yet been made in this country.

Farm Buildings, the Lyngby Open-Air Museum, near Copenhagen.

THE SURVEYORS' INSTITUTION:

PRESIDENT'S ADDRESS.

THE following is part of the opening address by Mr. Leslie Robert Vigers (President), delivered at the ordinary general meeting of the Surveyors' Institution on Monday:—

"Not the least of the responsibilities which attach to the position to which you have done me the honour of electing me is that of opening the winter session of the Institution with an address from the chair. The field which opens out before a new President in considering the subject of his address is so wide and the time at his disposal is so short that much serious thought is needed to decide not so much the questions which should be dealt with as those which should be left out.

In this I feel myself more fortunate than any of my predecessors, in that I am the second of my family to occupy this chair, and I can therefore turn to my father's opening address to supply me with a text upon which to speak to you to-night.

Tube Railways.

He, as some of you may remember, referred to what was then the new Central London Railway, but at that early date it was not possible for him to enter very fully into details as to cost of construction, etc. That line has now been opened for several years, the loop at Shepherd's Bush has been completed, and the extension to Liverpool-street is now in course of construction. Four other tubes have been engineered under our streets and opened for traffic. As they are now carrying about 148½ million passengers per annum, they may be said to have fulfilled a most useful purpose, and must materially have relieved the traffic in the streets.

Many, I have no doubt, will be interested to learn that the land and compensation for the following tube railways have amounted to:—

	Per mile.
Central London Railway	£75,287
Baker-street and Waterloo Railway	93,656
Charing Cross and Hampstead Railway	49,875
Great Northern, Piccadilly, and Brompton Railway	43,199

In New York the authorities find the money for construction and provide the land, while the contractors pay as rent the interest upon the bonds issued to provide the necessary capital for carrying on the work, together with 1 per cent. for the sinking fund. They have a lease for fifty years, with an option for one extension of twenty-five years, and they covenant to provide the equipment and work the railway. The facility thus given for the construction means that their tubes cost from 200,000*l.* to 250,000*l.* per mile to build, whilst ours cost from 500,000*l.* to 770,000*l.* per mile.

It must not be forgotten that the New York line was partly shallow subway, deep tube, and overhead line, and that part of the line was four tracks; the cost, therefore, cannot compare exactly with the London tube construction.

The following table, showing the rates paid by the four tube railways during the year ended December, 1909, gives some indication of the burden placed upon these undertakings by local taxation, the total amount paid annually representing at 3½ per cent. the interest on nearly two millions sterling:—

Central London Railway	£33,107
Great Northern, Piccadilly, and Brompton Railway	15,413
Baker-street and Waterloo Railway	8,790
Charing Cross, Euston, and Hampstead Railway	9,626
	£66,954

Assessment for Local Taxation.

From the rating of tube railways perhaps I may be allowed to wander into the wider subject of assessment for local taxation generally. It is now nearly ten years since the Royal Commission on this subject issued their final Report, and, though Valuation Bills have been promised, introduced, withdrawn, and promised again, we seem almost as far as ever from a settlement of this vexed question. Can it be that in Mr. Ure's speech of September last a careful searcher after truth may discover the reason of the seemingly unnecessary delay, and that an attempt will be made to fasten local, as well as imperial, taxation on the part instead of the whole?

While I cannot give time to enter upon so wide a field as this much-discussed and peculiarly controversial question, I should like to take this opportunity of placing before you a few suggestions for the amendment—the necessary amendment, I think—of our rating procedure. It has been suggested, for instance, that a committee of the county council should be responsible for drawing up the assessment lists. I do not, however, think that the spending authority should have any part in that duty, but that this should be dealt with by an independent tribunal. Many undertakings which pay large—and in some cases the largest—proportion of the rates in a parish, not being represented, have no word to say upon the expenditure, and it would hardly seem to coincide with the most perfect ideals of equity were those who stand to benefit by a high assessment of such undertakings to have anything to say as to the amount placed upon them.

Another thing, I am of opinion that members of assessment committees who are justices should not take part in appeals to quarter sessions in the case of companies' assessments. It would be in the highest degree improper for the chairman or a director of a railway company to sit on the Bench when some railway appeal was being heard, but it is a common thing for a member of an assessment committee in a neighbouring borough or union to sit and take part when such a case is being heard.

My view is that there should be a special tribunal of three independent men to hear all appeals in connexion with special properties not assessed upon the ordinary principles of rating. I am not prepared to say definitely what that tribunal should be, but I am inclined to think it should be presided over by a lawyer, such as a recorder, who should be assisted by a rating expert and a man of business. The rating expert should be a man of large experience, and should be precluded from undertaking private practice in rating matters.

The parish might still be the unit of valuation, but the rating area should be the county, and the valuation committee chosen from persons resident in the county, but not members of the county council or any other spending authority.

The present year has been rich in new statutes affecting the interests with which our profession brings us into contact, and I propose to say a few words on the more important of them.

The Housing and Town Planning Act.

The Housing, Town Planning, etc., Act, 1909, it is true, found a place on the statute-book twelve months ago, but it only came into operation with the current year, and it has aroused so great an interest among, not the profession only, but the public also, that I feel no apology to be needed for a short reference to it. The importance of its provisions are patent to all who either from interest or necessity have studied them.

Part I. of the Act, for instance, imposes new duties upon the owner of small house property, which neither the freeholder nor the leaseholder can afford to overlook Sect. 14 lays down that in any contract for letting for habitation a house, or part of a house, at a rent not exceeding in London 40*l.*, in boroughs and urban districts of 50,000 inhabitants 26*l.*, and elsewhere 16*l.*, there shall be an implied condition that the house is reasonably fit for human habitation, with a proviso that this does not apply when the house, or part thereof, is let for a term of not less than three years, upon terms that it be put by the lessee into a reasonably fit condition for occupation. The following section requires the landlord to keep the house reasonably fit for human habitation during the term.

In this connexion the local authority is given very strong powers of closure or demolition over the landlord, who, however, beyond a right to inspect his property, is given no protection against a bad tenant. Local authorities, on the other hand, are enabled to make a closing order if the house is in their opinion unfit for occupation, and recently the borough of Camberwell dealt with premises under this section.

The owner in question, in the exercise of his right, appealed to the Local Government Board to rescind the order, which they have power to do. They, however, ordered a public inquiry, which was duly advertised in the borough, and an inspector appointed to hold it. Three days were occupied in hearing the case, and as a result the Local Government Board rescinded the order of the Borough Council, making them pay the departmental costs, but leaving the owner to pay his own, the latter result, unless there were reasons of which I am unaware, appearing somewhat hard and having the appearance of penalising the owner for defending himself against an improper order on the part of the Council.

I do not wish to seem unduly critical of the action of the Department in this case, particularly as the Act has only recently come into force, but there is evidently something wrong when so comparatively simple an issue could only be determined after so lengthy and costly a hearing.

The more original, however, and perhaps the more important portion of Mr. Burns's Act is Part II., which deals with the subject of town planning, and has aroused the greatest interest and the most animated discussion in all parts of Great Britain. I do not propose to go into details with regard to the provisions contained in this part of the Act, for they were dealt with most ably by Mr. Willmot in his paper of last session, which with Mr. Davidge's paper on "Town Planning Systems" and the combined discussion thereon occupied four nights, and threw much light on this new and somewhat intricate subject.

Since then the Local Government Board have issued regulations laying down the procedure to be adopted with respect to the preparation and adoption of town planning schemes, although, having the lesson of the building by-laws before them, they have wisely included therein a power to dispense with or vary any requirement of the regulations where reasonable cause is shown.

The Local Government Board also very wisely, in a circular letter addressed to town councils and urban and rural district councils, drew attention to the importance of co-operation on their part with owners and other persons interested in the land affected by a proposed scheme. This seems to me of the utmost importance, for, although both the Act and the regulations seem to anticipate that schemes will in the main be planned and put forward by local authorities, I am not sure that in practice this would prove the best and most successful method.

I agree in the opinion, which Sir Alexander Stenning has expressed elsewhere, that there is already a large body of men having wide experience in this work, and that it is to them rather than to their confrères, the surveyors to the local authorities, that we must look for the successful carrying out of this part of the Act. While I should be the first to acknowledge the excellent work done by the latter for the health of the community, I do not think I should be dealing unfairly with them if I said that, as a rule, they have neither the time nor the special experience necessary for drawing up the details of a town planning scheme; such details would probably be better dealt with by the private surveyor. But a very useful work lies before the official in bringing together the surveyors of the surrounding estates, and in co-operating with them to secure wide main arteries sufficient to carry the traffic of a future population.

These main arteries would usually be found to follow the line of existing highways, and no time should be lost in laying down their direction by means of schemes. In the majority of cases immediate widening would not be necessary, but a great future saving to the public would be effected were urban and county authorities to join in preventing any building within a prescribed distance from the centre of these arteries, and in thus protecting the ratepayer of the future from the main cost of street widening in existing circumstances.

Matters connected with town planning of all kinds were dealt with so fully and so ably in the papers read at the successful Conference organised by the Royal Institute of British Architects last month that I feel it unnecessary for me to elaborate this part of my address, but I should like to

congratulate most heartily those who were responsible for the excellent arrangements of the Conference, and for the exceptionally interesting collection of plans, models, and drawings exhibited concurrently at the Royal Academy.

Development and Road Improvement Act.

From the Housing, Town Planning Act it is but a step to another measure, the importance of which is not perhaps altogether realised by every surveyor. I refer to the Development and Road Improvement Funds Act, which establishes a fund for aiding and developing agriculture and rural industries, forestry, transport, fisheries, etc., a nucleus being formed by a vote of half a million sterling per annum for four years. This fund will be administered by a body of eight commissioners, the selection of whom has occasioned some surprise among business men, although the inclusion of Sir Francis Hopwood among them gives some feeling of confidence that application for advances will be treated in a sound and businesslike spirit, and that the resources of the fund will not be wasted in impracticable experiments.

Part II. of the Act deals with road improvement, and is therefore perhaps more closely allied with the Town Planning Act than Part I. A Road Board, of which Sir George Gibbs—than whom no better man could have been selected—is Chairman, has been set up and given power to make advances for the construction of new roads or the improvement of existing ones, or themselves to construct and maintain new roads out of a road improvement grant which will be established. This Board has appointed an Advisory Engineering Committee, upon which all will be glad to see the name of Mr. John Willmot, who is well known in this room, and whose experience as County Surveyor for Warwickshire should make him peculiarly fitted to give advice on the construction and maintenance of roads, and other matters upon which the Committee will be consulted.

The Finance Act.

As President during the year in which has been passed the most important measure affecting land and real estate since the Poor Relief Act of the great Elizabeth, I shall be expected to say something about the Finance Act, although the time it has been in force has, as yet, been insufficient to enable us to arrive at an exact judgment of its effect.

It will be remembered that the Council of the Institution, when the new proposals were first placed before Parliament, thought it their duty—with no political or party purpose, but as representing the profession most likely to appreciate correctly the future results of those proposals—to make known their views thereon, and this they did by the issue of two memoranda and by a deputation to the minister in charge of the Bill.

I think I should not be incorrect in interpreting the general opinion of the profession as being that the fears expressed in the Council's memoranda have been justified by the event, and that real property of all kinds, but especially licensed property, has been seriously affected in value.

Land Taxes and Mortgages.

I should perhaps add a few words on the question of mortgages and the influence the land taxes have had upon them, although here I fear my observations on this subject will not prove more cheerful.

For the same reason that investors have been put out of conceit with land for purchase, they have acquired a distaste for it for mortgage purposes. Instead of having a value as steady as or perhaps steadier than almost any other security, it is now subject to sudden and considerable demands for taxation, which must give rise to such fluctuations in value as will necessitate a much larger margin of value than was formerly the case, while present holders of mortgages have, in many instances, had either to call in the mortgage or ask for a reduction in the amount borrowed. The matter then seems to resolve itself into a vicious circle, for the mortgagee may be unable to find the money, with the result that the property may be forced on to the market, depreciating not only its own value, but that of other property already on the market, and ending in loss to both parties concerned.

The Value of Property.

As President of the Institution, however, I should like to say a word of warning against a panic depreciation in the value of property. I have no doubt that, as soon as the market has settled down to the new state of things, a new level of prices will obtain, and it is our duty as valuers and surveyors to weigh carefully the factors which will determine that level. The population, for instance, of this country has in the past increased by about 12 per cent. each decade, and the mere housing of this increase, together with the provision of the workshops in which they will earn their livelihood, their transport from home to work, and the supply of their many wants, cannot help but give rise to a demand for both land and buildings, which must affect our calculations when we are asked either to advise as to the price on which a property should be placed upon the market, or as to that which an intending purchaser might offer without great risk of loss.

The holiday season this year has been, shall I say enlivened, by the issue of the famous Form IV., which has given rise to so much discussion, and has, I fear, in many cases, reduced that period of rest to very minute dimensions. The question has been raised whether the form in question might not have been simplified, and it is possible that to some extent this might have been done; but, on the other hand, it must not be forgotten that the fault is rather with the Act than the Form, and that the complicated and many different values set up in the Act make it difficult to draw up a simple set of questions which any owner of property might fill in without professional advice.

Gentlemen, may I, before concluding, thank you for the great honour you have done me by electing me your President, and express a hope that I may be able to represent you in such a manner as in no way to lower the status of the profession, and to emulate, so far as my ability may permit, the high standard set by the eminent Presidents who have preceded me.

When I look back to the days of my attendance as a student at the meetings in the old house, I find it difficult to realise that I have been chosen to follow in the steps of those who occupied this position in those days, and whom I still look back upon with reverence as the giants of the past. I can, however, promise that I will do all in my power to further the interests of the profession to which I am proud to belong, and in which I have worked for the past thirty-seven years under the guidance of my father. You will, I am sure, appreciate with me what a joy it is to him, and to me, that you have thought it well to place me in this chair during his lifetime."

MAGAZINES AND REVIEWS.

THE *Burlington Magazine* contains the second portion of Mr. Laurence Binyon's contribution on "The Chinese Paintings in the British Museum," with illustrations of "The Earthly Paradise," and other works of notably fine quality. The first article on Vincent Van Gogh, translated from R. Meyer-Riefstahl, conveys a good impression of the artistic methods of this innovator, who shares with Cézanne, Seurat, and Gaugain the credit of having founded a new school of painting, the further developments of which have taken shape in the curious work of the post-impressionists. Mr H. N. Veitch's article on "Sheffield Plate" is of value to collectors, and the illustrations are well chosen from fine examples.

In the *Art Journal*, Mr. Robert H. Smith gives the second instalment of his notes on "Gardens in Japan," illustrated by a series of views showing the important place that water takes in the arrangement of the Japanese garden. Now that the methods of the East secure more sympathetic appreciation in the Western world, there is a danger that the beauties of these Oriental gardens may give rise to servile imitation, which would be a pity, if it displaced the well-defined garden traditions of Europe. At the same time it would be idle to deny that the examples given repay careful study.

The article "Four Great Collections" in the *Quarterly Review*, by Sir Martin Conway, deals with the paintings at Buckingham Palace and Windsor, the Wilton House pictures, and with the collections of the Earl of Radnor and the late Dr. Ludwig Mond.

In the *Contemporary Review* Mr. Charles Tennyson deals with the question of copyright in architecture, and puts so clearly and logically the case for the architect that we take the liberty of quoting his opening statement, as follows:—

"It is worth while to consider whether architecture differs in any and, if so, in what degree from the other fine arts. That it is one of the most important and influential of the sisterhood can hardly be gainsaid. Indeed, Vitruvius went so far as to maintain that it expresses exactly the same ideas as music through a different medium, and used even to ascertain many of his proportions by a method of musical calculation. Sculpture, which is already protected by a statute of 1814, presents even closer analogies. The architect works from a design, as the sculptor from a clay model; both artists employ comparatively unskilled hands to do their rough work, though, of course, the actual share of the sculptor in the manual work of his art is much greater than that of the architect. Both use costly materials, upon the excellence of which a good deal depends. . . . It seems, therefore, that there can be no reason in principle against the proposed extension of protection to architecture. Now let us turn to the practical side. This depends on two questions. Firstly, has the architect a grievance? Secondly, if he has, is it possible and, if possible, advisable, to remedy it? . . . Does the piracy actually take place? That it does is common knowledge to all interested in the profession, and a list of instances will be found at pp. 174 and 175 of the evidence before Lord Gorell's Committee of 1909, which can, it is submitted, be regarded in no other light. Actual copying of a building can take place in one of three ways. The pirate may get possession of the original design and build from it. He may be enabled to do this by the fact of his being the commissioner of the building, who, it has been decided (see *Gibbon* v. *Pease*, 1905, 1 K. B., p. 810, and *Ebdy* v. *M'Gowan*, the *Times*, November 17, 1870), is entitled, in the absence of agreement to the contrary, to the plans; or he may have seen the plans at another person's house, at the office of some council, or reproduced in a newspaper. As long as the building is not copyright there is nothing to prevent him building an exact imitation from the plan, for the building is evidently not a "copy" of the plan in the eye of English law. True, the architect of the second building might possibly make himself liable for infringement of the plan if he had it copied and copies circulated among employees for the purpose of the second building; but even this might profit the original architect little, for if he had parted with his drawings to the commissioner of the building, the copyright in them (they being still unpublished) might be held to have passed with the transfer.

The second way in which copying may take place is by the pirate, with or without permission from the owner of the building, making measurements of it. Or, finally, he may, at any rate in the case of a simple external effect, be able to produce his copy by memorising or photographing the original building. . . .

It seems, then, that works of architecture often are in fact copied, and from this copying the architect may suffer damage in two ways. He may be deprived of work which he would otherwise have had, as where a builder, having a stretch of seaside property, commissions an architect to design a villa for it, and then himself builds from the designs of the first villa nine more to complete the row; or he may be injured in reputation by having his original design travestied by inferior imitation in unsuitable positions or materials.

It follows that one must answer the first question propounded above in the affirmative. The architect *has* a grievance. It remains to consider whether it is possible or advisable to remedy this grievance; and here it must be observed that architects have to face the hostile view of Mr. Justice Scrutton, who appended to his signature of the Report of Lord Gorell's Committee a reservation to the effect that he was unable to concur in the proposed inclusion of architecture among the protected arts, his reasons being the difficulties which he foresaw in the trial of what are new and original features of houses and in the remedies for infringement. Two other members of the Committee shared this view, which was the one expressed by the Committee of 1878. The second of Mr. Justice Scrutton's objections seems met by sect. 7 of the new Bill. As to the first, that copyright in architecture *can* be protected seems demonstrated by the cases that have occurred in foreign countries. Five of these are cited in the

appendix to the evidence taken before Lord Gorell's Commission (pp. 176-178 and 258 and 259). In four of them the architect succeeded. In two of these instances the case seems to have turned on a direct copying of plans; in another the copy was executed from measurements of a monument in a public cemetery; in the fourth case a Belgian architect (could he do so under the new Bill?) restrained a newspaper from publishing his design; while in the fifth the architect failed, being unable to prove that the work possessed any originality."

For Mr. Tennyson's further arguments we must refer our readers to the article itself.

The *Century Magazine* for November is an issue of exceptional interest. In the opening article Mr. A. L. Frothingham gives his reasons for identifying the great porphyry sarcophagus in the Vatican, hitherto regarded as that of the Empress Helena, as the cenotaph of Marcus Aurelius. His reasoning in regard to the character of the sculpture carries the conviction that the sarcophagus is certainly of a much earlier date than has been previously thought, and his further arguments certainly seem to strengthen the case he makes out. In "The Awakening of the West in Art" Leila Mechlin reviews the great movement going on in the newer States of the U.S.A. towards an æsthetic municipal ideal. Chicago, St. Paul, Milwaukee, and other western cities are quoted as having secured the best professional advice on development and embellishment; while in the provision of municipal art collections the many towns are displaying the greatest interest, and such progress as has been made is taken careful note of. The point is made that the American citizen is keenly desirous of having the best, and though mistakes may be made, courage, ideality, and sincerity are bound to result in great achievement. Dr. W. G. Thompson writes on "The Great Modern Hospital," introducing his studies of some of the larger Continental and American hospitals, with a few general remarks on hospital construction.

In *Harper's Magazine*, Mr. G. G. Coulton paints an interesting picture of the Mediæval Baron's Household, its method of life and domestic organisation—chiefly collated from documents of the Percy family. Mr. Archibald Henderson's poetically-written article on bridges is illustrated by photographs from the camera of A. L. Coburn, some of which display artistic quality of a high order; the view on the Tiber is, indeed, unsurpassable in technique. Mr. Henderson closes with an appreciation of New York, which may present it from a point of view unfamiliar to our readers:—

"The new New York, the theme of poets, artists, camerists, critics, typifies the new beauty in its magnificent manifestation of energy functioning for man's material needs. In its fitness, its soaring economy of means to end, its perfect adaptation of material, in structure and design, for democratic and civic service—New York is the type of the new beauty of the new era. 'That beauty,' says Van Dyke, 'is not a harmony of streets, squares, and houses, nor a formal arrangement of monuments, towers, and domes; but rather a new sublimity that lies in majesty of mass, in aspiring lines against the upper sky, in the brilliancy of colour, in the mystery of fields of shadow, in the splendour of fields of light—above all, in the suggested power and energy of New York life.' And where shall we find a more suggestive image of this American power and energy than in Brooklyn Bridge, with its grace of line, its waving tracery of cable like spun glass, its whole vast network spanning the river as lightly as a spider-web spans a doorway, its millions of passengers, its colossal power and compressed energy?"

In the *Edinburgh Review*, the article on "The Gothic Contribution to Renaissance Art" displays the results of a wide knowledge of mediæval times; it is interesting more on this account than as suggesting any train of thought on lines unfamiliar to those who have interested themselves in the works of the early Renaissance. The article "Eastern Art and Western Critics" is a vigorous attack on the position to which the Asiatic forms of art have been exalted in recent years; the author is distinctly unsympathetic towards these, and his conclusions seem to be vitiated by the assumption that it is necessary to institute a comparison between Eastern and Western art. Where both aim and method are so absolutely opposed, of what use is it to endeavour to strike a balance between their value in each case? All that can be said resolves itself into a question of racial and personal preferences.

Mr. W. Shaw Sparrow continues, in *Chambers's Journal*, his series of articles entitled "A Critic in the House," which deal with the problems of furnishing and decoration. Mr. Sparrow assumes a quite fatuous degree of ignorance in the public he desires to instruct, but still this is possibly an error on the right side, and should not prevent some of his views being of service to those better informed.

In the *Englishwoman* for November will be found an article on "Modern Stained Glass," by Mary Lowndes, in which the author points out:—

"In no country and at no time has more beautiful stained glass been manufactured than is now being made in England; it is quite as beautiful as the glass made 700 years ago for the glorious windows of Chartres. The 'gold-pinks' of to-day will vie in splendour with the flaming magnificence of the lesser wheel-window at Rheims. The art of stained glass has no more been 'lost' than the goldsmith's art, or the craft of the embroiderer.

Many manufactured articles, of course, have lost their beauty through the over-perfection of modern methods and the mechanical processes by which they are now produced; with stained glass, however, this is not so. The finest 'tablets' and slabs for the use of the glass-painter are still made in this twentieth century as the 'glass tablets' of Theophilus the monk were made before the Norman Conquest, and with the same tools.

In his delightful treatise, *Diversarium Artium*, he describes a process which is still continued in all its details, and a product which is essentially the same as it was in the tenth century. . . .

There are many persons desiring to enrich their parish church with a new stained-glass window, who will go to the Army and Navy Stores and order a representation of the Hosts of Heaven at 2*l.* the square foot. This product, when concluded, will be inscribed, 'To the Glory of God.' It can hardly be expected to enhance the glory of the donor, the church, or the artist who made it.

The fact is, a work of art cannot be ordered at general stores, or turned out at a low, uniform price, like sweated clothing. You may sweat the stained-glass painter, I suppose, like any other worker, but you cannot command by such a process more than his labour. His fancy and his moments of inspiration, if he be capable of them, are not for you."

The *Pall Mall* for November, though a varied and entertaining issue, has nothing of special interest for our readers.

The *Strand Magazine* contains a budget of suggestions, which are probably not intended to be taken too seriously, on schemes for rebuilding Buckingham Palace. The illustrations, from the hand of Mr. Adrian Berrington, display considerable imaginative power, and a much higher standard of draughtsmanship than one usually associates with the popular magazine.

Country Life for October 15 and 22 gives a well-illustrated description of Stonyhurst College, which occupies buildings erected in various periods from 1592 onwards. Few of our public schools have a more stately home than this magnificent group of buildings affords, and none can claim to possess a finer setting than the dignified gardens in which it is placed. In the issues of October 29 and November 5 we have Copped Hall, Essex, a Georgian house, with extensive gardens laid out by the late Mr. C. E. Kemp, in a style rather too elaborate for the dignified simplicity of the house. The same criticism applies to the interior, which was remodelled by the same artist. Mr. Kemp's imaginative power was apt to lead him too far when freed from the restraining influence of architectural control. In the number for November 12 the restorations and additions at Lympne Castle are described, with a number of good illustrations of this work of Mr. R. S. Lorimer. This strikes us as a particularly skilful example of the welding of new work with old.

The series of lesser country houses is continued by examples from the works of Messrs. Walter Brierly, E. Guy Dawber, Walter Cave, Frank Chesterton, and Edgar Wood, the last-named a remarkable design for a house with a flat roof, and with walls carried from ground to parapet without a projection of any kind.

The *Estate Magazine* contains a useful and practical article on "The Lighting of Country Mansions," in concluding which the writer says:—"In many cases a system of electric lighting will be found the simplest to adopt, particularly where water-power may be available for driving the dynamo. As a light, electricity is steady, of good colour; it creates practically no heat, consumes no oxygen, gives off no gases, and is not dangerous, while it is clean and very convenient. Where water-power may not be available, it may not be as cheap as other forms of lighting, but when the saving in the cost of the renewal of decorations is taken into account this helps somewhat to balance matters. . . ."

Concrete maintains its usual high standard of interest to those concerned in reinforced work. The two most notable items in this magazine are probably the descriptions of new buildings at Constantinople, and the footbridge at Mizen Head, Ireland.

THE LONDON COUNTY COUNCIL.

THE usual weekly meeting of the London County Council was held at the County Hall, Spring-gardens, S.W., on Tuesday, the Chairman, Mr. Whitaker Thompson, presiding.

CHARING CROSS IMPROVEMENT.—Sir John Benn moved:—

That, in view of the improved traffic facilities which the new road through St. James's Park will give to London, this Council do proceed with the consideration of the necessary steps for opening up the access to Charing Cross; and that it be referred to the Improvements Committee to bring up a report as early as possible on the whole subject with the necessary recommendations.

Mr. Hayes Fisher seconded, and the resolution was carried unanimously.

PROPOSED COUNTY SESSIONS HOUSE.—A report was brought up by the Local Government, Records, and Museums Committee on the proposal to erect a new County Sessions House. In November, 1909, the Committee reported as to the findings of the Departmental Committee appointed by the Home Secretary to consider and report what place would be most suitable, having regard to convenience and economy, for transacting the Quarter Sessions business of the County of London, and what, if any, improvements could be made in the arrangements for the trial of criminal cases and the hearing of appeals. The important question now awaiting settlement is that of the most suitable place, having regard to convenience and economy, at which to hold the courts permanently. Among the conclusions arrived at by the Departmental Committee on this part of the subject were the following:—

It is desirable that all, or at least the criminal, business of the sessions should be transacted in one building.

The existing sessions house at Newington is insufficient to accommodate all the business of the sessions, and cannot be rendered suitable by means of enlargement or alteration.

The site at Newington is not appreciably more inconvenient of access than any other site that could probably be acquired, except a site in the central district, *i.e.*, that bounded by Holborn, Farringdon-street, the Strand, and Shaftesbury-avenue.

If regard is had to economy only, it is desirable that a new sessions house should be built on the site at Newington.

If regard is had chiefly to convenience, a site in the central district above described would be most suitable for all classes of persons connected with the sessions.

The Departmental Committee also stated that they considered that a site adjoining or in the vicinity of that for the new County Hall, although as convenient as regards situation as Newington or Bloomsbury, would not be altogether suitable, in view principally of the undesirable character of the persons who would be drawn to the district.

In view of the opinion of the Departmental Committee with regard to the Central Criminal Court and the inferiority of the

situation of Newington as compared with a site in the central district specified in their report, the Local Government Committee state in their report that they directed their attention in the first instance mainly to the question whether a court house could be provided in such central district without throwing an unduly heavy burden on the county ratepayers. They came to the conclusion that to acquire a site of the necessary size in a district of the character suggested, and to build and furnish a court house, would necessitate a capital expenditure out of the county fund of about 280,000*l*. As a set-off against this expenditure, there would be the receipts from the sales, when effected, of the sites of the existing sessions houses. The Committee, however, expressed the opinion that this expenditure was prohibitive, and that to provide for the Quarter Sessions on the Newington site was undoubtedly the most economical scheme. The report goes on :—

The question arises whether it is essential that the site should be cleared and an entirely new building erected, or whether the existing court house could be enlarged and altered satisfactorily, which would be the more economical course to adopt. The cost of providing a new court house at Newington, in accordance with an enlarged schedule of requirements which has been drawn up by the Standing Joint Committee, is estimated at 95,000*l*., inclusive of equipment, electric lighting, lifts, the value of additional land required, and incidentals. This is an approximate figure only, as it is not possible to make a close estimate of the total cost until detail plans have been prepared and quantities taken out, and it is based on the assumption that the new building will be erected under the supervision of the Council's architect.

Mr. G. Drage, the Chairman of the Committee, in moving the reception of the report, described the existing accommodation for the Quarter Sessions as both inadequate and insanitary.

Mr. Harold Cox moved the following amendment :—

"That, in order to avoid the waste of public money involved in building a new sessions house, it is desirable to provide by legislation for trying at the Central Criminal Court indictable cases now sent for trial to the County of London Sessions, and that the Local Government Committee be instructed to confer thereupon with the City authorities and the Home Secretary."

Mr. Cox said that there were acres of unused space at the Central Criminal Court, and if this was not sufficient there was a portion of the site not built upon; there was in addition a piece of land belonging to the City Corporation which they had been unable to let, and another piece which was let, but of which they could re-acquire possession.

Mr. Stuart Sankey pointed out that the Departmental Committee had stated in their report that there was not sufficient accommodation at the Central Criminal Court to carry out the proposal.

After further discussion the amendment was carried.

APPOINTMENT OF DISTRICT SURVEYORS.—The Building Acts Committee reported that they had considered as to the arrangements that should be made for filling the vacant posts of District Surveyors in the districts of (i.) Battersea, Central; (ii.) Bromley St. Leonard; (iii.) Deptford; (iv.) Kensington, North; (v.) Kensington, South; (vi.) Rotherhithe; (vii.) Streatham, East; and (viii.) Wandsworth, East. In response to an advertisement forty-four applications were received, but of these only twenty-nine, one of whom was ineligible on the ground of age, possessed the necessary certificate of competency to perform the duties of District Surveyor. Of these sixteen were seen. The Committee recommended and it was agreed that the following be appointed :—Mr. Percy John Black (Battersea, Central), Mr. Robert Henry Jewers Mayhew (Bromley, St. Leonard), Mr. Baxter Greig (Deptford), Mr. George Tolley (Kensington, North), Mr. Richard Dominic Hansom (Kensington, South), Mr. Charles Archibald Daubney (Rotherhithe), Mr. Arthur George Morrice (Streatham, East), Mr. Henry Thomas Bromley (Wandsworth, East), Mr. Arthur Halcrow Verstage (Sydenham), and Mr. Ernest Alexander Young (Catford).

PROPOSED NEW MUSIC-HALL, ETC.—The Theatres and Music-Hall Committee reported that they had considered the following :—

Drawings, submitted by Mr. M. Cohen, of a concert-hall to be known as the New King's Hall, in course of erection at 133-139, Commercial-road.

Drawings, submitted by Messrs. F. Matcham & Co., of a music-hall proposed to be erected in Euston-road, Chesterfield-street, and Belgrave-street, and to be known as the Euston Hippodrome.

Drawings, submitted by Mr. G. W. Booth, of the Electric Palace, proposed to be erected at 17, Highgate-hill.

RESIGNATION OF A DISTRICT SURVEYOR.—The Building Acts Committee reported that Mr. Augustus W. Tanner, A.R.I.B.A., had resigned his appointment as District Surveyor for Rotherhithe, Hatcham, and St. George-in-the-East.

ST. PAUL'S BRIDGE.—Mr. Edward White announced that an agreement had been come to with the Corporation in regard to this scheme. The Corporation had decided to allow tramways on the new bridge, and to widen the eastern side of St. Paul's-churchyard.

THE PROBLEM OF THE ARCHITECT'S ASSISTANT.

THE following is part of a paper read by Mr. J. V. Hibbert, F.S.I., at a meeting of the Guild of Architects' Assistants on November 8 at Prince Henry's Room, No. 17, Fleet-street, E.C. :—

"The practising architect is himself too often engaged in a hand-to-hand struggle for recognition to have much time to spare for considering the position of his assistant, and unless that gentleman is prepared to look after his own interests he is more and more likely to be pushed aside in the struggle. The signs are now everywhere apparent that the practising architect for his part is determined to make a move in the matter, and to call, if need be, on Parliament to help him to pull his cart out of the rut. But in the meantime the architect's assistant stands like a disinterested spectator, with every good wish for the vociferating principal, but otherwise rather amused by the commotion he is making than concerned to inquire how the issue is going to affect himself. It appears to me and to the founders of this Guild that he would be better employed in putting his own shoulder to the wheel and giving a direction to the cart, since he is bound to follow it.

The problem, then, is how and in what direction his efforts should be applied. It can only be solved by a serious and united endeavour on the part of the body of assistants to see clearly what the position is, to thresh out by discussion, by criticism, by contradiction a possible solution of the problem; and to this end this Guild of Assistants has been formed, in the hope that it will at least furnish a base from which these operations can be started.

The Need for the Guild of Assistants.

It may be questioned whether there is any need for calling into existence for this purpose another body within the profession. We may say in answer that, while we desire to co-operate in every way, consistent with the objects we have in view, with all the existing architectural societies, we conceive that none of the existing bodies occupies in practice the ground which we are endeavouring to cover.

The Royal Institute of British Architects is avowedly and mainly concerned with the advancement of the art of architecture. While we also are fully conscious of the reverence which is due to our art, we feel that we can safely leave its protection in the hands of the august and powerful body which has already taken charge of it, and we propose to devote our energies to the practical advancement of the interests of the architect's assistant, and by so doing believe that we shall advance the interests of the profession at large.

Now, while the Institute has done so much for the advancement of the art of architecture, and has drawn to itself the ablest and most important members of the profession and the support of a large number of practising architects and their assistants, it is a curious fact that when it descends to the consideration of any of the practical difficulties and troubles which afflict the practice of architecture its efforts are not usually crowned with any conspicuous success.

The comparative failure of the Institute to dominate the relations between the architect and the general public may be ascribed to various causes, which, however, I do not propose to discuss. But that there is a want of driving power in the edicts of the Institute, even as regards its own members, is, I think, unquestionable. Now, in all these, of education, of the status and conduct of the profession, the voice of the assistant has never been raised, notwithstanding the fact that he is largely concerned in all of them. He has hitherto been content to leave everything in the hands of those he has looked up to as his leaders, and, while supporting the organisations of his chiefs, he has never considered the advisability of organising on his own account, or whether, in fact, he was being led in the right direction. Now let us consider what it is that the qualified assistant wants.

The Needs of the Qualified Assistant.

His first and constant aim is to cease to be an assistant, and to become a practising architect and put up buildings on his own account. Next to that he desires employment for his services as an assistant to men who will give him both fair payment and credit for the work he does for them. His chances of achieving either of these ends are at the present moment very infrequent, nor is there any body, so far as I know, at present concerned in improving them. Quite apart from the long and recurring periods of depression in the building trade, there are, as we know, other causes at work. But even if there were not, if all we had to consider were the inevitable fluctuations of prosperity which afflict all alike, it were only common prudence to endeavour to provide for them. A properly-organised register of unemployment and a system of insurance are surely worth consideration. A properly-conducted register of unemployment would be of incalculable benefit to the whole profession, and would form a means of communication between the principal and assistant, which is very badly needed.

Unemployed Insurance.

Associated with this is the question of unemployed insurance. Here, again, the exact information at present available on the subject of unemployment is too meagre to enable anyone to formulate such a scheme, and in this case, again, there is none concerned in obtaining the necessary information. The assistant must do the work for himself. The problem is his, and he must solve it. Such a system would be the means of tiding many a man over several hard and anxious months in his search for work, instead of leaving him, as at present, at the mercy of the first job offered to him in an overcrowded and underpaid market.

The Economic Factor.

Apart from these external causes, there are, as I have said, other internal causes at work limiting the outlook not only of the assistant, but of the whole profession, and among these not the least, in my opinion, is that childish piece of makebelief on the part of the profession at large that the architect is only to be regarded as an artist, and not at all as a man of business. Now, whether as an artist or as a man of business, his position is governed by that economic factor which is always at work, and which at some point or other enters into the consideration of even the most abstract questions, and I think that hitherto this factor has been to a great extent ignored in considering the practice of the art of architecture.

How is it that many large commercial combinations have been able to take a substantial and increasing amount of work from the profession? Simply by looking at the matter from an economic standpoint, which we have never made a practice of doing. As a result we have never yet succeeded in justifying our existence to the general public as an economic necessity, but, on the contrary, have sedulously imbued them with the idea that we are an expensive luxury.

Now, the architect in the practice of his art is called upon to deal with many matters not merely of interest, but of vital importance to his client, but he has ignored his plain economic value to exalt his artistic value,

with the natural result among a business community that a large amount of work has been lost to him, people preferring to employ what they call a "practical man." Even in those cases where the public feel it necessary to employ the services of an architect they do so largely with the idea that he will act as a means of defence against the contractor by tying that gentleman down to a definite contract and seeing that he carries it out, and their choice of any particular architect for this purpose is very rarely governed by any regard to his artistic qualifications. On the contrary, they would probably regard any pronounced artistic qualities with considerable distrust; and, indeed, having regard to some of their experiences in the matter, I think we must admit that their distrust is not without some reasonable grounds.

Responsibility of the Architect.

When we consider the enormous amount of responsibility which an architect takes on his shoulders in carrying out a commission, the variety of functions which he undertakes to perform, and the numerous details over which his authority extends it is perhaps not surprising that he seems to be constantly endeavouring to shuffle on to somebody else as much of it as he possibly can. The quantity surveyor, the constructional engineer, the sanitary and other specialists have all arisen to supply the deficiencies of the architect. If any man needs an encyclopædic knowledge and firm business grasp for the performance of his duties it is the architect, but the popular idea of an architect is that he is merely a man who can draw, and this idea, as I have said, has been largely fostered by the architect himself.

Registration.

It is the attainment of an enhanced economic value which is the main object of the ardent registrationist, and he proposes to attain this object by simply compelling the general public to employ him. I am personally somewhat doubtful of the efficacy of registration alone to achieve this desired result. At least it will be necessary, first of all, to convince the general public that the result is a desirable one for them, and, secondly, the undeniable fact that architecture is an art lays any scheme for restricting it open to objections. But I feel no doubt at all that much can be immediately done by a combination of the existing forces within the profession, determined on carrying out a united policy, and in the formation of this policy the assistant should take care that his interests are included.

But at the present moment, while the principal has begun to wake up to the urgency of the situation as regards his own practical interests, the assistant is still following the same old route, saying, "It is well. It is well."

The Practice of Architecture.

Notwithstanding all the talk about architecture as an art, there is no getting away from the fact that the architect practises his art for his own material advantage, and that most of the best architecture—at least in modern times—has been produced by the professional architect working with this object; while, on the other hand, we have several notable examples of what to expect from the amateur architect who practises architecture for the mere love of the thing. Also it should not be forgotten that architecture is not an end in itself, that every building has in its initial conception a practical purpose to serve independent of the art of architecture, and the truest artist is he who never loses sight of this purpose. The vargaries of architectural fashion produce at times some very ridiculous results, which are not to the credit of either the artistic or practical good sense of the profession; and the architect cannot, like some more fortunate men, hide his mistakes. His bad buildings stand as a perpetual reproach to him, an eyesore to the public, who cannot get away from them, and a constant annoyance to the people who have to use them.

The Capable Architect's Assistant.

The capable architect's assistant claims, like his chief, to be an artist and a qualified professional man. He is ready to accept every available opportunity to match himself against all comers in proof of his ability, and I need only point to the results of several recent and important public competitions as evidence that he has proved himself to be a person of some consideration. Few as the assistant's opportunities are, it cannot be said that he has not always shown himself eager to take advantage of them; but they are at present far too few for him to place any reliance on them as providing him with a means of establishing himself in his calling. His chances of obtaining recognition are mainly confined to the opportunities afforded by an occasional open public competition; while within the profession itself his chances of obtaining a decent living as a capable assistant are becoming more and more restricted, and without capital or influential support his chances of creating a private practice for himself are nil. While there exist these obstacles to his advance, he is pressed upon from behind by a constantly flowing stream of new recruits into the profession. This problem of the wholesale creation of fresh assistants for the convenience and profit of the practising architect is another of those internal causes affecting the position of the assistant which it would be worth his while to inquire into, and, if necessary, take action on.

The Overcrowded Market.

I fear that he will raise a storm of protest if he does take action, and it will be necessary for him to tread cautiously. You will, of course, be told that you have really no just cause to complain, because all markets are overcrowded, always have been overcrowded, and always will be. To a certain extent, no doubt, this is true, although in our case and within my own recollection there have been times when it was certainly not so true as it is now. But what we have really to complain of is not so much the overcrowding as the way in which it acts. It might be supposed that by the operation of the law of the survival of the fittest that it is the incompetent assistant who would be squeezed out or suffer most from the pressure, whereas, on the contrary, it is the competent assistant who most rapidly goes to the wall. If in the daily competition of both the architect and his assistant quality of work was the determining factor, then both the incompetent architect and the incompetent assistant would be quickly eliminated. But quality of work is not the determining factor; the question is one of quantity and cheapness, and the effect of overcrowding on the competent assistant is to force him either to come down in his price to the level of the incompetent man or to leave the market.

The Question of Salary.

Taking the Associateship of the Institute as indicating a certain standard of competence on the part of its possessor, can it be denied that its market value has for years been steadily declining, so much so that we now find public authorities advertising without the slightest shame for an Associate of the Institute at a salary which they would hesitate to offer to a competent road foreman. This steady decline in the value of the Institute's qualification does not appear to trouble the authorities of that body very much. It may be that they have no remedy to suggest, or it may be that they, too, are rather afraid of the ground they may have to tread upon. But to attempt to cover the matter up by telling the assistant that his position is merely a transitory one, and that it is a waste of valuable time on his part to trouble himself about such a minor matter as the amount of his salary, is mere trifling with a serious subject. Suppose that, taking a leaf out of the registrationist's book, the assistants were to turn round and say, we agree with the principle of registration, and we demand that any Registration Bill shall contain a clause requiring every architect employing an assistant to employ only duly-qualified men at a scale of salaries to be fixed, and that he shall not have at any time more than a stated number of unsalaried assistants or pupils in his office? I am not advocating any such proposal myself, believing, as I do, far more in the free action of general opinion than in the methods of Parliamentary compulsion, which have a tendency to act in unexpected ways. But I think if this claim were to be put forward concurrently with any Registration Bill the promoters of the Bill would have some difficulty in rebutting it. The principle, indeed, has already been adopted by Parliament in connexion with schools desiring to be recognised by the Board of Education. In this, as in all other matters I have referred to, the assistant must apply his own efforts to find a solution, and abandon the passive attitude of merely waiting for something to turn up in his favour.

Trade Unionism.

And now, finally, as regards the charge of trade unionism which is foolishly levelled against this movement by those whose sole notion of a trade union is that it is an organised tyranny of the incompetent majority over the competent few. If the pure doctrine of individualism is so extremely precious, surely the Institute trespassed when it condescended to draw up a recognised scale of fees, whereby the value of the architectural services of the unknown and possibly incompetent Mr. Brown is exactly equivalent to that of Sir Aston Webb! The main difference in this respect between the Institute and the Bricklayers' Union is that while the bricklayers have managed to maintain an efficient control over their standard, the Institute has often to deplore a lack of *esprit de corps* in its members. If we err in this matter we do so in good company, for there is no difference in principle between a union which seeks to establish a recognised scale of fees and one seeking to establish a recognised scale of wages. The principle of union for a common end is, of course, open to abuse, and no doubt has been and will be abused, but the same can be said of every principle known to political and social science. The effective usefulness of any combination of men in the cause of progress depends at the bottom on the personal worthiness of its individual members."

MANCHESTER SOCIETY OF ARCHITECTS:

THE ENGLISH TRADITION IN BUILDING.

On the 9th inst., at a Sessional Papers meeting of the Society, Mr. Herbert L. North, B.A., read a paper on "Some Aspects of the English Tradition in Building."

"Tradition in building, he said, is the accumulation of human experience in producing a beautiful balance between three opposing forces:—(1) The purpose for which the building is to be erected; (2) the time or money which is to be expended on it; and (3) the nature of the materials which are to be used.

Just as the modern locomotive, the finest work of art at the present day, is the gradual evolution, from the Rocket to the Decapod, of the better adaptation of the materials and forces to the use, so in English architecture we see an almost unbroken line of advance, from the wattle church at Glastonbury to the Abbey of Westminster, the finest church in Christendom, or from the circular hut of our British ancestors to the well-nigh perfect stone house of the XVIth and XVIIth centuries, which are found with but little difference of type in all the stone-building counties of England.

Just as the forest trees of England are typical of the soil, so these buildings, however humble, could be nothing but English, and one with the unrivalled beauties of the English landscape. One only has to think, for instance, of the work shown in Mr. Guy Dawber's book on the "Cotswold Cottages" to realise the truth of this.

There can be little doubt that the great works of the Middle Ages exerted on the mediæval mind an influence not unlike that which the vast engineering works of our day do on us.

These latter works do not require any love of colour or much idea of beauty of form to be appreciated, and, as the modern man has had both these things killed in him, he may probably appreciate all the more the wonders of steel construction, just as a blind man has his sense of touch increased. But the mediæval man had been trained from his cradle to beauty of colour and form; his churches gave him that, and in a lesser degree his houses too, and so he was able fully to appreciate the unrivalled buildings of his own time. Architecture then exerted a much greater influence than it does now; all mediæval literature shows that

The Public Architecture.

How is it that the public care so little about architecture, and the ordinary builder is able to put up such unpractical and hideous atrocities, and that, in spite of the efforts of the architects for 300 years, we are in a much worse plight than we were when Inigo Jones and Wren appeared?

Is it not, I would humbly submit, because the chain of tradition has been broken, and we have been cut off from the experience of the past? The old native tree of tradition has been felled nearly to the ground, and the foreign craftsman and the paper architect have grafted on a new and exotic branch which, though something very good in its native country, has here, in the end, borne very bitter fruit.

The Renaissance.

Gentlemen, I wish to say nothing that could possibly hurt anyone's feelings on this well-worn subject of the introduction of the exotic branch of the Renaissance, so I will condense all into one short paragraph, and mention it no more. There is no doubt that the Renaissance in this country was at first a stimulating influence, it doubtless revived to a certain extent that cunning craftsmanship which was so hard hit by the Reformation; but if you follow it far enough, when the great lights had departed, it gradually became more pompous and pedantic, not suited to a free country, and, finally, the greatest sin of all, it killed the English love of colour. As a typical instance of this, how many people at the present day would prefer a cold plaster cast to the grand coloured sculpture of the old Greeks, or the charming painted ivory, alabaster, and wooden images of the Middle Ages, culminating in the XIIIth century?

There is something in what Ruskin said:—"The Renaissance has brought us from the lancet window, the detached shaft, the solemn harmony of gold and purple, to the square opening in the brick wall."

Our other difficulty is the paper architect. This, of course, was doubtless bound to come; at any rate, here we are; but the result has been that architecture has become an individual matter, not a matter of almost national universality.

Hold on the Public Taste.

This, I would suggest, is the reason why we have so little hold on the public taste. We have one fashion after another, and so hopelessly confuse the public and also the craftsmen, who are continually making new weird shapes and mouldings, all of which have no bearing whatever on our real business, that of building. We have in the course of a generation gone through from one end of the architectural gamut to the other, and, however beautiful many examples of the various styles may be, is not the clamour of conflicting tongues likely to leave us high and dry just as we were? Think for one moment how great a force we should become if we all attempted to grow once again our own English traditional tree, not to adopt all the details of any particular period, but to work on the same practical and truthful system again. It is a system of infinite elasticity, in proportions, methods, and materials, and there is the widest possibility for individual genius to show itself.

I daresay this may seem a vain dream, but as long as we have not more unity between ourselves we shall never have any effect on those who build without architects, and they are the vast majority.

Unity is strength, and if we are to save the beauties of our English landscape we must make our united starting-point the English tradition.

Some Practical Points.

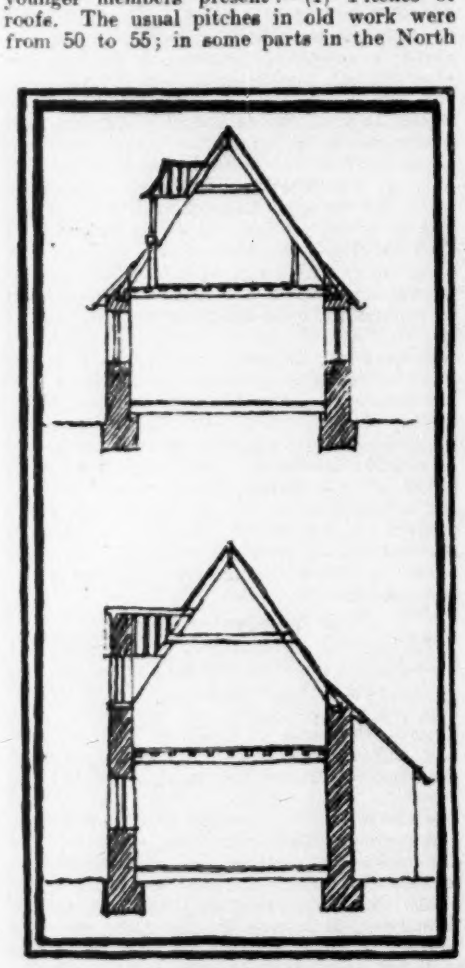
Now, with your kind permission, we will touch on a few practical points. In towns it seems likely that reinforced concrete will take the place of the older materials for large buildings, and, of course, this will require some entirely new treatment consonant with the new method, but for smaller buildings and in the country the old materials are still the cheapest and quite suitable. The great differences between us and the old builders in the matter of materials are (1) that they had oak, while we have pine—this really disposes of half-timber work and much external woodwork of any kind which they were able to have, and throws us back on to brick and stone; and (2) we have Portland cement, which they had not—this enables us to make our houses perfectly dry and watertight, which they were unable to do. Apart from these two differences, we build in much the same way.

A XXth-Century Style.

Now, of course, we all admit that in the XXth century we should not set out to copy the work of any period as a style; it was that which brought that great ecclesiastical and national movement, the Gothic revival, a greater period than our own, into disrepute, but if the general building methods of any time are the most practical and suitable we can find it is folly to ignore them; not adopting their ornament or detail, our ornament should come from our gardens, and our detail from the real requirements, and, bearing in mind that the natural colour of our local materials is better than any ornament, and the grain of our wood more beautiful than any carving, then we shall be on the right path towards a XXth-century style, which is really beginning to grow in domestic work, at any rate, in the simpler and cheaper sort.

Old Methods.

Let us examine some of the old methods. Though we know them well, they will, I trust, bear repetition, and may interest the younger members present:—(1) Pitches of roofs. The usual pitches in old work were from 50 to 55; in some parts in the North



Sections showing two proportions usual, also lean-to at flatter pitch, with roofs at each pitch about equal in length.

they were much flatter where stone slabs were used, but with small slates or tiles the higher pitch was used, and even steeper pitches with thatch. A good steep pitch is very practical in that the valleys can be very safely done with soakers under the slates, avoiding the hideous lead gutters, and easily repaired, and also on the whole it is cheaper, saving walling, and having less thrust, and giving far more distinction to the building both inside and out. The usual span of old roofs was about 20 ft. in domestic work, and if there were any cross roofs the work was so arranged that all the spans were the same, so that the ridge came level throughout, and the pitches also, and there was no difficulty about keeping the slating courses level on each side of the gutters. Another practical advantage was that all the roof could be well seen from the ground. Roughly speaking, these were the two kinds of proportions employed. When an additional lean-to is added, say, at a pitch of 45 deg. the length from ridge to change of pitch and change of pitch to eaves is best equal.

This system of about a 20-ft. span is a good one for another reason, as it enables every room almost to be lit from two sides, and makes it unnecessary to crowd the wall space with windows. As to the shape of the windows, they can be long or high, just as required, and of wood or stone. Casements, swing, or Yorkshire lights, or even the rattling sash, first ventured with wonderful boldness by Phillip Webb fifty years ago in a typically English house, are all equally right and good as use requires, and lead or wooden glazing. One good rule, which I learnt from Mr Lutyens when fortunate enough to be in his office, was to keep a good space from the heads of the downstairs windows to the sills of the upstairs, generally about 5 ft. Another was, never allow a big space from the eaves to the head of the window below. Another, wooden dormers in the roof should be at least halfway up the roof. Brick chimneys should never be less than 1 ft. 10½ in. thick, and then not high; 1 ft. 1½ in. by 9 in. flues cost very little more than 9 in. by 9 in., and will give the required thickness. If chimneys are of brick they should not be built of anything thicker than 2½-in. bricks.

Ceilings.

Now why should some be content with an arid waste of plaster for a ceiling, one that shows all smoke and dirt at once? An open ceiling, like the old ones, showing 9-ft. beams and 3-ft., or, better, 4-in., joists plastered between (the timber, in simple work, can be all sawn, faced, and whitewashed, and even to go so far as a few running patterns in primary colours of rose and convolvulus, honeysuckle, and vine along the beams), will make a ceiling that will not show the dirt half so much, get rid of the useless space often germ-laden between the floors, and give additional air space below. Such a ceiling is not uninteresting to look at, and the slightly extra cost is met by the saving in height, and when the plaster is kept close to the boards it is as soundproof as the usual method.

Partitions.

In these days of thin patent partitions we look upon the Georgian hollow, lath-and-plaster one with no great favour. The old people knew how to do a thin partition very well, too. They either had the stud and panel all in wood, or the stud and plaster like half-timber work, or stiff boarding one side and plaster the other, with sill and headpiece. These all make very excellent partitions, and are really beautiful, either sawn-faced and whitewashed, with plaster rough from the wooden float between, or painted studs and white panels, or American coffin-oak boarding, with plaster behind, look well and are all simple. These are a little more expensive than the ordinary, but on the whole the traditional type of house is not more expensive, but decidedly less than that based on the Georgian system.

One more point. In these days we burn coal, and so the old open fireplaces for wood will not do, and we must be quite practical in this point, as in all others, and abandon old methods where they do no longer apply. We may well take joy, too, in our sanitary science and beautiful fireclay fittings, which are real works of art.

Church Work.

I fear that I shall weary you, but may I say a few words on church work? Now we enter upon a different level of construction, for a church has to be built on much better and more lasting principles than the house. Yet in these days I do not think it is quite right to spend too much on detail when fine proportion is so much more important. As a point of departure, possibly the work of the XIIIth century is the best; the work of the XIIIth century is the best; the late XVth, which is rather fashionable, was the worst period in our church's history. The XIIIth was a grand period, not altogether in its aspirations unlike our own, and the lancet has such wonderful possibilities. One can see it allied to the Greek decoration and the Arab ornament in Sicily, and to the dome at Mount Athos and the East,

and it somehow so exactly fits the spirit of the English Church. Later styles have less possibilities of expansion, have they not? Let us not forget how the Church of England always, right through the deadness of the Georgian period, stuck to Gothic feeling, and also how that the square east end is the architectural sign of our ecclesiastical independence. Finally, whatever we do, let us not forget or fear colour; it is almost more important than form, and without it no architecture worthy of the name ever existed.

Several members took part in the discussion which followed. Mr. Phil. Barker spoke of Mr. North's work, and thought it always looked at home with the English landscape. The President, Mr. P. S. Worthington, thought that tradition served its most useful purpose when we had in our study steeped ourselves in it, and it became part of us, and came out naturally in our work, rather than when traditional features or methods were definitely copied. He regarded the Renaissance as the natural outcome of the life of the period.

BUILDING AND LABOUR NOTES FROM AUSTRALIA.

THE Federal Government's sympathies are at the present time with the working classes. It has already announced that, as far as house painters employed on Government works are concerned, members of trades unions will be given preference of employment and a minimum wage of 10s. a day.

Last year the value of the new buildings erected during the twelve months in the city and suburbs of Sydney exceeded 4,000,000*l.* There is every reason to believe that this year's record will easily eclipse last year's. The healthy condition of the trade is indicated by the difficulty experienced in obtaining materials and workmen. Even in a commodity made upon the spot, such as bricks, the demand is months ahead of supply, though every effort is being made to expedite matters. There is nothing about this in the nature of a boom. Sydney business men are not visionary or speculative; in fact, they are usually spoken of as being the opposite to that. The work in progress is justified by residential and business requirements. Really much of the work now undertaken is the outcome of the lack of imagination of the average Sydneyite of a decade ago, who failed to realise the potentialities of the city. But the reckoning day has come; buildings have to be pulled down and rebuilt, new streets made, and old thoroughfares widened and remodelled.

Within the next twelve months there are to be four new theatres erected at Sydney. The Adelphi, for which the contract has been let, will be the largest in the Commonwealth. It will provide seating accommodation for about 3,000 persons, and is to be ready for occupation by March 1, 1911. The exterior is to be brick and cement, and the entrance vestibules and stairways finished with marble and tiles. It will be provided with sliding roof, and the number and size of the exits will enable the theatre to be cleared two minutes after the fall of the curtain. It is expected to cost over 30,000*l.*

The Orpheum Theatre will have frontages of 164 ft. to three streets. As well as a theatre, the building will comprise a coffee palace, containing 264 bedrooms capable of accommodating 550 persons, and eighteen retail shops. The building will be four stories in height. Cost of construction will exceed 50,000*l.* The architects for all the new theatres are Messrs. Eaton & Bates, Sydney.

During the past year a few English tradesmen have quietly found their way into the principal cities of Australia, where in almost every instance they have obtained constant employment without any difficulty. A leading master painter, who has in his employ several English tradesmen, says that those he has seen are a fine class of men, such as Australia needs in large numbers at the present time.

Sydney Municipal Council aims to have uniformity in size of verandahs or awnings for shop fronts in the city streets. It favours doing away with the ordinary verandah supported on posts, and using instead cantilever verandahs or suspended awnings. One of the objections of the city Building Surveyor to the old type of verandah is the use of return ends, which are used for advertising purposes. He recommends that their use should be prohibited, and only open ironwork ends permitted. The cantilever awning is already used upon a number of buildings erected recently in the city.

Among new buildings about to be erected in Sydney are two adjoining buildings, one of which will consist of ten stories. Both will be of fireproof material, have concrete and marble main stairs and street fire-escape stairs, and contain six passenger lifts. The façades will be glazed brick and freestone. The buildings will be commenced this October and ready for occupation by November, 1911. They will contain 6,000 ft. and 3,000 ft. floor space respectively. The architects are Messrs. Inskip & Rosenthal.

The building trades are fairly good in New Zealand at present. The dominion appears to have recovered from the depression from which it recently suffered. The average building work in New Zealand is not of so substantial a description as one meets with in Australia. Wood is the popular material for the average dwelling. This material has at least the merit of being good for painters and decorators. Most medium-sized cottages are finished with canvas and paper on walls and ceilings, and interior woodwork stained. A dull finish for natural wood is much favoured just now in both New Zealand and Australia. In the former country the procedure usually is to coat the bare wood with a mixture of half boiled oil, half raw oil, and a little turps. This is allowed to stand for twenty-four hours, and then followed by a coat of patent knotting either used pure or diluted with methylated spirits. For a dead surface the knotting requires to be thinned. In good work the finish is usually two coats of varnish. The oil and knotting finish does not crack, as is frequently the case when shellac is applied direct to the bare wood.

At the rate things are going at Sydney it looks as if the whole business quarters of the city will be rebuilt within the next decade. Premises built forty or fifty years ago are quite unsuited for modern requirements, and while allowed to stand do little more than occupy valuable sites. The remodelling of the city now going on was made necessary by the failure of our fathers to realise that the style of building suitable for England was not necessarily suited for this part of the world. In the free, open country they built dwellings in exact imitation of those they had been familiar with in crowded thoroughfares of the cities of Great Britain. Where land was of trifling value, and given away by the authorities by the square mile, the colonists built their dwellings flush with the streets, crowded them together with scant yard room, and in style and design quite unsuited for a climate where one may live continuously in the open air.

The fact is people are not born architects, and nowhere does one realise this more than in Australia. It will take a long time to develop an Australian style of domestic architecture. That things are shaping that way is evident. For instance, now if one goes into town in many parts of Queensland where the cottages are all new you will look in vain for chimneys to the house. Houses are built without fireplaces. Up till recently, in the south particularly, it never occurred to anyone to leave out in Australia what was essential to a house in Europe.

Another curious instance of lack of originality in the average person is shown by the style of dwelling popular in many inland parts. To the Australian settler the first consideration in a house was shelter. The first dwellings erected in newly-settled areas had no pretentions to architecture. They were invariably four walls supporting a hip roof and perhaps a skillion, the inside being partitioned into two or four rooms. The roof was of bark or galvanised iron, frequently unlined, and walls decorated with cheap wall-papers or illustrated newspapers. When the settler's financial standing improved, or the requirements of a growing family rendered necessary a larger dwelling, a new house, similar in plan, but more liberal in size and appointments, would be erected a few feet in front of the old dwelling. The best bedrooms and parlour would be in the new house, and the old house utilised as a kitchen and boys' quarters. In the country districts (outside townships) this represents the average farmer's or settler's home. Frequently when the farmer or squatter builds a new house upon a new site he simply repeats the style of dwelling or collection of dwellings we have described—viz., the large house with four or more rooms, and immediately behind it a small detached building to serve as a kitchen and boys' room. The arrangement is inconvenient, and has nothing to recommend it, but when a man is his own architect he naturally builds the best or the only style of house he is familiar with.

FOREIGN AND COLONIAL.

Bank Building, etc., Toronto, Canada.

The Imperial Trade Correspondent at Toronto, Mr. F. W. Field, has forwarded information as to the following possible openings for British Trade:—A Toronto company propose to set up paper-making plant at Sault Ste. Marie at a cost of 1,000,000 dollars (about 205,000*l.*). The Bank of Toronto have awarded a contract for the construction of a new head office at that city at a cost of 1,000,000 dollars (about 205,000*l.*). Among the requirements for the work will be steelwork, ornamental ironwork, marble, bronze work, vaults and safes, plunger elevators, cabinet work, stained glass and decoration. Mr. Field states that favourable consideration would probably be given to offers from British firms who have accredited representatives at Toronto, or who would be willing to send a representative out there. The names and addresses of persons with whom firms might communicate in connexion with each of the foregoing matters may be obtained by British firms on application to the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, London, E.C.

Building Works, etc., Straits Settlements.

The *Straits Budget* of September 29 publishes the annual address by the Governor of the Straits Settlements on the financial, etc., position of the colony, in the course of which he stated that among the more important services which it is proposed to undertake in 1911 are the following:—Building of a new district court; construction of a sea-wall across the gap at Johnston's Pier; raising of low-lying land adjoining Penang-road, and draining of the swamp at Balestier-road; erection of a lighthouse on Kuruman Island, off Labuan; construction of a hill railway (see p. 9 of the *Board of Trade Journal* of October 6); completion of water supply extension works at Bukit Seraya, Province Wellesley, and Lumut, Dindings; construction of revetment wall to part of the reclamation at the Malacca River mouth. Reference was also made by the Governor to the following municipal works:—The sanitary engineer appointed to report on the removal and disposal of sewage at Singapore has recommended the establishment of a system of underground sewers throughout the town. A scheme has also been under consideration for increasing the water supply of Penang by the construction of a large storage reservoir at the Waterfall Gardens. A new hospital for infectious diseases is shortly to be built in Singapore.

Barracks, Brazil.

The *Diario* of October 19 contains a notice, issued by the Ministry of War, inviting tenders for the construction of barracks intended for the 3rd Regiment of Artillery in Cruz Alta. A deposit of 10,000 milreis (about 700*l.*) will be required to qualify tenders, which will be opened on December 9. Tenders should be addressed to the "Capitão Ajudante, Escriptorio da Commissão Constructora de Quarteis no Rio Grande do Sul," Santa Maria, Rio Grande do Sul, Brazil. Further particulars respecting the contract may be obtained at the same address. Local representation is practically necessary.

National Department for Hygiene and Sanitation at Buenos Aires.

The *Boletin* of October 12 contains a decree authorising the contract for the construction of the building intended for the National Department for Hygiene and Sanitation at

Buenos Aires, to be placed with Messrs. Vinent, Maupas, & Jauregui. The cost of the work is estimated at 990,000 pesos (about 87,000*l.*).

THE ASSOCIATION OF TEACHERS IN TECHNICAL INSTITUTIONS:

TECHNICAL EDUCATION AND THE BUILDING TRADES.

A MEETING of the building section of the Association of Teachers in Technical Institutions was held on Saturday, October 22, at the Northern Polytechnic. Mr. J. Sandham (Battersea Polytechnic) was elected chairman of the section for the ensuing year.

An address was given by Mr. John Wilson, President of the Association. The title of the address was "The Aims and Objects of the Association of Teachers in Technical Institutions with Special Reference to the Building Trades." He said that the development of instruction in building subjects and the building trades is dependent to a great extent upon the general progress of technical education, including such points as—(1) The better previous preliminary training of students in the elementary and continuation schools; (2) increasing the number of students in the technical schools by such methods as (*a*) enforcing upon the public and the employers the necessity of technical training, (*b*) procuring a steady stream of students passing from the elementary schools, through the day "trades" or "technical secondary" schools, or through the evening continuation schools to the technical schools, thereby preventing that large loss of our possible students due to the "break" in education between the years of fourteen and seventeen; and (3) the institution of specialised "trades schools" or "technical secondary schools."

The Association is therefore agitating for general reforms in our national system of technical education, such as—(1) A rise in the "leaving age" from the elementary schools; (2) elementary school education to be more practical and "constructive" and less "bookish"; (3) compulsory attendance at day or evening (preferably day) continuation schools between the ages of fourteen and seventeen, with limitation of the hours of labour of adolescents; (4) the institution of day "trades" schools, etc., and technical secondary schools (age thirteen to seventeen); (5) the linking of continuation and secondary schools to the technical schools; (6) more scholarships (day and evening), with maintenance grants for technical students.

The teaching of building subjects has always occupied a prominent place in the curricula of the technical schools, especially as far as evening work is concerned. It is surprising, however, the relatively small attention given to day instruction in the building trades and architecture by the English technical institutions. "The great development of technical education which has taken place during the last twenty-five years is probably largely due to that enthusiasm and persistence given to the 'forward movement' by the early advocates for the teaching of building construction and allied subjects." The technical schools afford the only opportunities for technical instruction open to many thousands of workers engaged in the building industries.

The building section, by its work in the past, has already made its mark upon the teaching and examinations of building subjects in this country. It has secured reforms in syllabuses of instruction and examinations (Board of Education and City and Guilds) and scholarship schemes (London County Council). The Council of the Association looks to the section for the suggestion and initiation of reforms and developments in technical education as applied to building subjects, and also for the special consideration of matters primarily affecting the professional interests of building subjects teachers.

Among subjects demanding the early consideration of the building section are the following:—(*a*) The general question of the training of the building trades employee and the craftsman. The section should always keep prominently before the public and the educational world the increasing necessity for technical education as applied to the building trades. This is often somewhat overlooked and underestimated, *e.g.*, (1) in the newly established "central schools" in London and Manchester the specialised technical instruction is apparently to be almost entirely in engineering or commercial subjects; (2) there is very little provision, if any, for the highest scientific and technological instruction and research in building and architectural subjects in the University colleges in England or in the Imperial College of Science and Technology, as compared with the instruction in the highest branches of engineering, etc.; (3) the lack of sufficient specialised "trades" schools in the building subjects. The section should elaborate the outlined general scheme of technical education for the building trades put forward by the section in 1906 as a guide to educational administrators and the public.

(*b*) How to secure a closer co-operation of the employers of labour and the trade unions with the technical schools.

(*c*) The periodical revision of existing syllabuses and examinations to keep these abreast with the constant change in industrial methods and educational conditions. (1) Separate papers for builders in stage 3 and Honours, Board of Education examinations in practical geometry; (2) division of Honours stage of building construction and drawing into four subjects—(*a*) Materials, (*b*) structural design, (*c*) sanitation, (*d*) preparation of complete working drawings; (3) the urgent needs for the institution of thorough practical examinations for many subjects in City and Guilds subjects for which at present no practical examination exists.

(*d*) The desirability or otherwise of the amalgamation of the examinations of the Board of Education with those of the City and Guilds.

(*e*) The desirability or otherwise of the proposal that all elementary or first-grade examinations should be conducted in future by the schools or the local education authorities, all other higher examinations to be conducted as at present.

(*f*) The development of instruction in sanitary science or sanitary engineering.

(*g*) The relationship of the teaching of architecture to the teaching of building construction, and the general question of the position of the technical institutions in the training of architects.

(*h*) The training of future teachers of building subjects.

(*j*) The raising of the status of the teaching of building subjects and of the teacher of such subjects.

(*k*) The improvement of the existing examinations in building subjects so that the certificate awarded shall be no longer totally unrecognised in the building trade by employers and craftsmen.

(*l*) "Grouped courses," compulsory or otherwise, for evening students.

In the discussion that followed several matters of importance were dealt with, viz.:—(1) The relationship of the teaching of architecture to the teaching of building construction in technical schools; (2) the want of co-operation of architects, employers, and trade unions with technical schools; (3) the qualification of teachers; (4) the provision of special centres for instruction of future teachers; (5) the modification of the Board of Education syllabus in building construction, dividing it into four or more sections, *i.e.*, construction and drawing, design of structures, materials, sanitary engineering, quantity surveying, steel and ferro-concrete construction; (6) courses of instruction for building students; (7) the raising of the status of the teaching of building subjects and of the teachers of such subjects; a recognised diploma in building construction valued on an equality with "ordinary" or "pass" B.A. or B.Sc.; (8) the improvement of existing examinations in building subjects so that the certificate shall be of practical value.

The next meeting will be held at the Northern Polytechnic on Saturday, November 19, when Mr. Sandham will read a paper on "Grouped Courses for Evening Building Students."

THE ROYAL AUTOMOBILE CLUB.—In reference to the illustration of the Pall Mall façade of the Royal Automobile Club which we published last week, we omitted to mention the name of Mr. E. Keynes Purchase as joint architect with Messrs. Mewes & Davis for this building.

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.—The Chevalier Professor C. Formilli will read a critical and historical paper on Monday, November 28, illustrated by lantern slides, on the Cosmati mosaic and marble workers who were called from Rome to Westminster Abbey to build and decorate the shrine of Edward the Confessor, the tomb of Henry III., and other tombs, and to make the mosaic pavement before the altar and in the sanctuary. There will be on view the same day in the galleries of the Royal Institute an exhibition of full-size coloured reproductions of the above works, executed under the direction of Professor Formilli, by order of the Italian Government, for the forthcoming International Exhibition of Art, to be held in Rome in 1911.

LONDON COUNCILS.

Barnes.—Church-road is to be widened between Station-road and The Homestead, at an estimated cost, including purchase of land, of 5,650*l.* Various streets are to be kerbed, paved, and channelled, at an estimated cost of 3,000*l.* The Electrical Engineer is to prepare a scheme for increasing the generating capacity of the electricity works and to provide further office accommodation. The following plans have been passed:—Messrs. Reed & Roberts, public hall, Triangle Corner, Sheen-lane; Mr. J. Whitcombe, additions to "Hillfield," Vicarage-road; Mr. E. J. Partridge, twenty-five houses, Rosslyn-avenue and Priory-gardens; Mr. F. E. Rosser, for Mr. L. G. Clayton, four houses, Lonsdale-road.

Bermondsey.—The following plans have been passed:—Mr. T. D. Leng, Czar-street Works, Evelyn-street, Deptford, S.E., additions to building, Laxon-street, Long-lane; Messrs. Gordon & Gunton, Finsbury House, Blomfield-street, building, Dockhead.

Deptford.—Messrs. Dow, White, & Gee, who were appointed to take out the quantities for the New Cross Branch Library, have been engaged to measure up the work for all future certificates at a fee of 15*l.* 15s., and to measure up the work in the basement and agree the variations at a fee of 2 per cent. for additions and 1½*d.* per cent. for omissions. Plans have been passed for Mr. C. Leidig to build an addition to the mineral water works, Alpha-road.

Ealing.—Application is to be made to the Local Government Board for sanction to a loan of 4,000*l.* for the erection of a new swimming-bath for children near the present Central Baths. It was stated that plans had been prepared by the Borough Surveyor, and it was hoped that the building would be ready by next summer. The tender of Messrs. Davies, Ball, & Co., at 4,557*l.* 12s. 11d. was accepted for the construction of new sewers. The Surveyor's estimate was 5,550*l.*

Friern Barnet.—The Urban District Council has accepted the tenders of Mr. W. Iles at 750*l.* and 1,435*l.* for making up of St. John's-avenue and Sutton-road respectively. The following plans have been passed:—Messrs. William Bros., four houses, Myddleton Park; Messrs. Nicholls & Son, seven houses, The Crescent; Mr. Franklin, twelve houses, Pollard-road.

Hendon.—Application is to be made to the Local Government Board for sanction to borrow money in regard to the following private street improvement work:—Gillingham-road, 1,007*l.*; Albert-road (part of), 1,354*l.*; Collindale-avenue (part of), 2,374*l.*; Crewys-road, 1,375*l.*; Marion-road, 1,209*l.*; Vicarage-road (part of), 649*l.*; Eaton-road, 554*l.* The Urban District Council has passed the following plans:—Mr. C. W. Cave, eight shops, Finchley-road; Mr. H. A. Bernstein, thirty-six houses, Sandringham-road; Mr. F. Scear, five shops, Bell-lane; Messrs. W. Moss & Sons, Ltd., two pairs houses, Chatham Close; Mr. W. Tout, factory, Booth-road, Collindale-avenue; Mr. J. F. C. Boll, six houses, Templars-avenue; Mr. H. A. Welch, four houses, Corringham-road; Messrs. Parker & Unwin, nine houses in various streets; Mr. Adams, two pairs houses, Hodford-road; Messrs. Edmondsons, Ltd., forty-one shops, Golder's Green-road, and house, Golder's Green-crescent; Mr. F. A. Smith, four houses, Brent-street; Messrs. Edwin Evans & Son, ten houses, Hamilton-road; Mr. E. Streather, five houses, Andrews-road, Golder's Green, and St John's-road; Mr. F. Bristowe, ten houses, Woodstock-avenue; Hampstead Tenants, Ltd., six houses, Temple Fortune-lane and Farm-walk; Mr. J. T. Roberts, two pairs houses and nine shops, Lawrence-street, Mill Hill; Mr. H. T. Bonner, six houses, Templars-avenue. The Rural District Council has passed the following plans:—Messrs. Westacott, thirty-seven houses, Somerset-road, Pinner; Mr. W. H. Watts, twelve houses, Pinner-road; Mr. A. Trevor Dawson, alteration to Edgwarebury House; additions to Lecture Hall, High-road, Harrow Weald.

Ilford.—Plans have been provisionally passed for Mr. E. T. Dunn for twenty-four houses, Gartmore-gardens and Green-lane; also for Mr. L. Randall for four houses, Lansdowne-road.

Lewisham.—The following plans have been passed:—Messrs. Norfolk & Prior, six houses, Brownhill-road; Mr. G. H. Walker, four houses, Highclere and Sunnydene-street; Mr. T. A. Boughton, twenty-four houses in various roads.

New Malden.—The Council has decided to erect a refuse destructor at an estimated cost of 2,500*l.* In the meantime various improvements are to be undertaken at the sewage works, at an estimated cost of 540*l.*, and the Surveyor has been instructed to prepare draw-

ings and particulars of the plant which may be necessary.

Shoreditch.—Interests in Nos. 61 to 69 (inclusive), Baring-street have been acquired at a cost of 1,785*l.* for the widening and construction of a new street from East-road to New North-road.

Stoke Newington.—Plans have been approved for Mr. S. H. Burdwood for a cinematograph theatre in Stoke Newington-road, by Trumans-road.

Tottenham.—The following plans have been passed:—Mr. G. Farnborough, four houses, Sirdar-road; Mr. F. Hamlett, 764, Barking-road, Plaistow, E., ten houses, Gladesmore-road; Messrs. Millington & Sons, stock-room at Crown Works, Fountayne-road; Mr. G. W. Rowley, care of Mr. H. S. Couchman, 520, High-road, Tottenham, eleven houses, Rosebery-avenue, and house and shop, Hollington-road; Mr. J. S. Alder, Church of St. Benet Fink, Walpole-road. Messrs. Weber, Son, & Phillip have lodged plans for a factory in West-road.

Wandsworth.—Messrs. J. Mowlem & Co., Ltd., are to pave Fircroft-road, Balham, with Aberdeen adamant paving at 875*l.* The Surveyor's estimate was 904*l.* 19s. 11d. The following plans have been passed:—Messrs. J. Lyons & Co., Ltd., alterations and additions at 99-101, High-street, Putney; Mr. J. Soper, five houses, with shops, East Hill, Fairfield; Messrs. W. Johnson & Co., Ltd., hospital and mortuary, Lower Richmond-road, Putney Lower Common; Mr. P. C. Davies, motor garage, rear 52-54, Heybridge-avenue, Streatham.

Watford.—At the last meeting of the Rural District Council it was reported that, in consequence of work in regard to the erection of cottages at Bushey Heath and Aldenham having been commenced before plans were approved, the Surveyor had the foundations and everything else uncovered, so that he could satisfy himself whether or not the by-laws had been complied with. He found no infringement except as to the height of the rooms. Strong remarks were made by Councillors as to builders and architects commencing work before plans were approved, and the Council decided to issue notices to the owners of the cottages in question calling upon them to show cause why the same should not be pulled down.

Woolwich.—Mr. J. J. Bassett, 121, Earlshall-road, Eltham, has had plans passed for sixteen houses in Dunvegan-road and six houses in Dunvegan-gardens, Eltham.

WESTMINSTER CITY COUNCIL.

AT the fortnightly sitting of the Westminster City Council on Thursday last week the following business was transacted:—

Chancery-lane Widening.—A letter was received from the City of London Corporation pointing out that an opportunity occurred for the widening of Chancery-lane on the building of premises by the Law Union and Rock Insurance Company. A small portion of the site was within the City of Westminster. The City authorities had agreed to pay 1,220*l.* for the land needed, subject to the freeholders being allowed to construct vaults and pavement lights along the entire frontage. It was decided to co-operate with the City Corporation in the matter.

Mall Improvement.—The Improvements Committee reported the receipt of a letter from H.M. Office of Works regarding the request of the Council that the opening upon Trafalgar-square should be made of a similar and adequate width to the arch leading to the Mall. The Office of Works point out that they have no jurisdiction outside the parks, and that the completion of the street was a matter for the City Council and the London County Council. Mr. W. Emden said the reply of the Office of Works could not be considered an adequate one, and he moved that a further letter be sent to the First Commissioner, pointing out that this was a national improvement, and also that the London County Council be asked to join the City Council in a deputation to the First Commissioner of Works. Mr. Tozer seconded the motion. Col. Probyn pointed out that the City Council had already materially contributed to the scheme by sacrificing a large amount of valuable rateable property. The motion was carried.

THE GERMAN Y.M.C.A. BUILDING.—In our issue of November 5 we gave illustrations of the German Y.M.C.A. building, but we omitted to mention that the facings were supplied by Messrs. Thomas Lawrence & Sons, Bracknell, Berks. We printed the description of the building as we received it from the architects.

PROJECTED NEW BUILDINGS IN THE PROVINCES.*

ABERYSTWYTH.—Additions, infirmary; Mr. R. Jones, Borough Surveyor, Aberystwyth.

Andover.—Alterations and additions, police station (680*l.*); Mr. W. J. Taylor, County Surveyor, Southampton County Council, The Castle, Winchester.

Ashburton (Devon).—School (2,100*l.*); Mr. J. F. Young, Secretary, Education Committee, Devon County Council, Exeter.

Balsall.—School; Mr. J. Willmott, 6, Waterloo-street, Birmingham.

Barnsley.—Proposed extension of baths, York-street; Mr. J. H. Taylor, Surveyor, Town Council.

Bedworth.—Police station; Mr. J. Willmot, County Surveyor, Warwickshire County Council, 6, Waterloo-street, Birmingham.

Belfast.—Reconstruction of headquarters (10,000*l.*); Secretary, C.I.Y.M.S., Belfast. Baths, Ligoniel; Mr. H. A. Cutler, Engineer and Surveyor, Belfast Town Council.

Belvedere (Kent).—Church (7,000*l.*); Vicar, St. Augustine's

Birmingham.—Shop premises, Bull-street; Messrs. R. Fenwick & Son, builders, William Edward-street, Birmingham. Extension, Jewellers' School; Messrs. Cossins, Peacock, & Bewlay, 83, Colmore-row, Birmingham. Premises, Allison-street; Mr. F. Brady, builder, Birmingham. Factory, St. Paul's-square; Mr. J. P. Osborne, architect, Colmore-row, Birmingham; Mr. L. Wilkinson, builder, Handsworth. School, Washwood Heath; Mr. T. Buckland, architect, Norwich-chambers, Birmingham.

Bridlington.—Proposed town hall; Mr. E. R. Matthews, Surveyor, Bridlington Town Council.

Brixham (Devon).—School (1,800*l.*); Mr. J. F. Young, Secretary, Education Committee, Devon County Council, Exeter.

Canterbury. — Various building works (3,000*l.*); Mr. J. Plummer, Clerk, Board of Guardians, Canterbury.

Childerley Gate (Cambridgeshire).—Proposed school (2,000*l.*); Mr. Austin Keen, Secretary, Education Committee, Cambridge County Council, Cambridge.

Cliffe (Kent).—Extension, explosives factory, for Messrs. Curtis & Harvey, Ltd., 3, Gracechurch-street, E.C.

Clydebank (Glasgow).—Additional offices, etc., for Messrs. John Brown & Co.

Cockfield.—Church, St. Mary; Mr. C. Hodgson Fowler, The College, Durham.

Cresswell.—Enlarging church; Vicar of Cresswell.

Dalkeith.—Additions, combination poor-house; Messrs. Speirs & Co., Glasgow.

Dartford.—Extensions, church (6,000*l.*); Trustees, Wesleyan Church.

Droylsden (Lancs).—Mission church (4,000*l.*); Vicar of St. Andrew's.

Dudley.—Hostel at training college (8,500*l.*); Messrs. Crouch, Butler, & Savage, architects, 33, Newhall-street, Birmingham; Mr. M. Round, builder, New-street, Dudley.

Dunfermline.—Aerated water factory, Townhill-road; Local Syndicate.

Falmouth.—Sunday schools; Trustees, P.M. Church, Falmouth.

Farcet.—Proposed school; Mr. S. G. Cook, Secretary, Education Committee, Hunts County Council, Huntingdon.

Foggintor (Devon).—School (1,200*l.*); Mr. J. F. Young, Secretary, Education Committee, Devon County Council.

Forestfach.—Congregational Chapel; Trustees, Chapel Committee, Forestfach.

Forest Hall.—Premises, Benton-lane (1,700*l.*), for the Forest Hall Working Men's Social Club.

Frickley.—Hospital (5,000*l.*); Mr. E. Holdsworth Walker, architect, Doncaster; Messrs. Dennis, Gill, & Son, builders, Nether Hall-road, Doncaster.

Garforth.—Administrative block at hospital; Mr. H. C. Wood, Surveyor, Tadcaster Rural District Council.

Glasgow.—Stores and offices, corner of Garscube-road and Firhill-road for Messrs. C. Vaux & Sons, Ltd., Sunderland.

Goodwick.—Police station; Mr. Thomas, surveyor, Haverfordwest.

Goole.—Cottage hospital (6,500*l.*); Goole Board of Guardians.

Gorleston.—Proposed blind and deaf institute for the Governors of the East Anglican Institution; Mr. John E. Burton, architect, Norwich.

Heckingham.—Proposed isolation hospital; Mr. E. Cadge Loddon, Clerk, Lodden and Clavering Board of Guardians.

Hoddesden (Herts).—Baptist Church and Sunday schools, Burford-street; The Trustees.

Hinckley.—Additions, factory, for Messrs. Davis & Sons. Additions, factory, Druid-street, for Mr. G. P. Lord.

Hook (Pembroke).—Proposed school; Mr. H. E. H. James, Secretary, Education Committee, Pembroke County Council, Haverfordwest.

Horley (Surrey). — Wesleyan Methodist Church; The Trustees.

Hull.—Offices, High-street; Commercial Union Assurance Company, Hull.

Keighley.—Extension, nurses' home, also proposed extensions, infirmary, and improvements at workhouse; Mr. G. E. Spencer, Clerk, Board of Guardians Keighley.

Lambourn (Berks).—School (1,678*l.*); Messrs. Treasure, builders, Orpington.

Leeds.—Alterations and additions, Millgarth-street police station (3,900*l.*); Mr. Paul Rhodes, builder, Skinner-lane, Leeds.

Leeming Bar.—Church; Rector of Bedale.

Legsby.—School; Messrs. Conyers & Smith, builders, Tealby.

Leigh (Kent).—School; Mr. W. Robinson, Caxton House, Westminster, S.W.

Leyland.—Cinematograph hall; Mr. J. Green, Derby-street, Leyland. Cooling tower and offices off Golden Hill-lane for Messrs. J. E. Baxter & Co., Ltd.

Llanelly.—Workmen's dwellings (12,000*l.*); Mr. G. Watkeys, Town Hall, Llanelly.

Melksham (Wilts).—Proposed school (250 places); Mr. W. Pullinger, Secretary, Education Committee, Wilts County Council, Trowbridge.

Merthyr.—Maternity depôt at workhouse (2,538*l.*); Messrs. Warlow & Warlow, builders, Merthyr.

Methil.—School, Bayview Park, for the Wemyss School Board.

Middlesbrough.—Labour home; Church Army.

Mountain Ash.—Electric theatre; Mr. Seymour, architect, Cardiff.

Neath.—Extension, school, Herbert-road, for the Neath group of School Managers.

Newport (Mon.).—P.M. Church; The Trustees.

Newtown.—School, Scot-lane (8,800*l.*); Mr. J. W. Home, Secretary, Education Committee, Wigan Town Council.

Northampton.—Proposed secondary school for girls, St. George's-avenue; Surveyor, Northampton Town Council. The following plans have been passed:—Four houses, Loyd-road, for Mr. A. Wilford; alterations, premises, 28, Kingsley Park-terrace, for the Northampton Co-operative Society: seven houses, The Broadway, for Messrs. Clements Bros.; additions, factory, Stimpson-avenue, for Messrs. J. Sears & Co.; four houses, Allen-road, for Mr. G. F. Sharman. Plans have been lodged for three shops, 98, 100, and 102, Abington-street, by Mr. W. Robinson, Miss James, and Church Charity Trustees.

Nottingham. — Lace warehouse; Messrs. Heazell & Son, architects, 7, Upper Parliament-street Nottingham. Extension, church (6,000*l.*); Wardens of St. Mary's Church.

Odiham.—Proposed additions, Grammar School (750*l.*); The Governors.

Odsey (Cambridgeshire).—Proposed school (1,535*l.*); Mr. Austin Keen, Secretary, Education Committee, Cambridge County Council, Cambridge.

Radcliffe.—Extension, asylum (25,000*l.*); Mr. E. Hooley, Shire Hall, Nottingham. Proposed enlargement of technical school; Dr. H. L. Snape, Secretary, Education Committee, Lancaster County Council, Preston.

Rochdale.—Music hall on site of old Mason's foundry, for Mr. Thos. Hargreaves.

Sculcoates.—Factory for Messrs. Major & Co., Ltd.

Shiney Row.—School; Messrs. J. A. L. Robson & A. J. Dawson, joint architects, Durham County Council, Durham.

Shrewsbury.—Drill hall; Mr. F. Shayler, architect, 16, Pride-hill, Shrewsbury.

Soham.—Proposed school (1,050*l.*); Mr. Austin Keen, Secretary, Education Committee, Cambridge County Council, Cambridge.

Southampton.—Adaptation of 121-2, High-street, into offices for Borough Treasurer; Mr. J. A. Crowther, Borough Engineer, Southampton Town Council. Plans have been passed for Messrs. Weston & Burnett for a house, Foundry-lane, and church, Oak Tree-road.

Tanfield.—Council offices, etc.; Mr. R. Heslop, Surveyor, Tanfield Urban District Council.

Walsall.—The following plans have been passed:—Extension, premises, Goodall-street, for Messrs. J. Leckie & Co.; Council schools, Field-street, Bloxwich, for the Education Committee.

Walton.—Buildings, Broom Hill; Mr. J. F. H. Harriman, architect, Carlisle.

* See also our list of Competitions, Contracts, etc., on another page.

Wembly (Middlesex).—Drill hall for Lads' Brigade; Vicar of Wembly.

Whitby.—Conversion of old Whitby Club premises, Siver-street, for local Conservatives.

Wilmcote.—Extension, school; Mr. J. Willmott, 6, Waterloo-street, Birmingham.

Witton (Birmingham).—Theatre; Messrs. Collins & Godfrey, builders, Tewkesbury.

OBITUARY.

Mr. Ralph Selden Wornum.

We greatly regret to announce the death of Mr. Ralph Selden Wornum, which has just occurred at Deal, after an illness of some duration. Mr. Wornum was an architect of considerable repute, who carried out many works abroad as well as in this country. Among his executed buildings may be mentioned Lord Wimborne's villa, Biarritz; the summer palace for the Queen Regent of Spain at San Sebastian; houses at St. Jean de Luz, Santander, and Gibraltar. In partnership with Mr. Edward Salomons, which lasted for ten years, he built in 1877 Agnew's Galleries in Bond-street and many other buildings. Later he erected Lord Glenesk's house in Piccadilly, Islet, Maidenhead Court, Tylney Hall, Hants, etc. Mr. Wornum, who was born in 1847, was the son of Ralph Nicholson Wornum, the keeper of the National Gallery. He was articled to Professor Roger Smith in 1865, and obtained the Travelling Studentship of the Royal Academy in 1872. Elected a Fellow of the Institute in 1888, Mr. Wornum was in 1891 nominated an assistant member of the Board of Examiners, subsequently to act as a Vice-Chairman, a position which he occupied from 1896 until the absorption of that Committee by the Board of Architectural Education. He had also served on the Competitions Committee, and was a member of the Council for the session 1897-1898. He will be remembered by many Institute students as one of the joint-examiners in design.

Mr. J. La Farge.

Mr. John La Farge, who died at Providence, Rhode Island, on the 14th inst., shared with the late Augustus St. Gaudens the highest honours of pioneer art in America. Both artists were of French descent. As a young man La Farge was to some extent a looker-on in the world of art, and, although he worked in Couture's studio in Paris about the year 1856, he afterwards studied law in New York. Under the influence of William Hunt, however, he adopted art finally as his profession, and his first great opportunity came in helping to decorate the interior of Trinity Church, Boston, under the guidance of H. H. Richardson, one of the founders of the modern school of architecture in America. Commissions for further work were immediately forthcoming, and La Farge built up a great reputation for decorative work, especially for stained glass. He was keenly interested in Japanese art, and studied it as much as possible. His "Letters from Japan" are well written, and, under the title of "The Higher Life in Art," were published his Scammon lectures on the Barbizon School.

APPLICATIONS UNDER LONDON BUILDING ACTS, 1894 to 1909.

AT the meeting of the London County County Council on Tuesday the following applications under the London Building Acts were dealt with (the names of the applicants are given between parentheses):—

Lines of Frontage and Projections.

City of London.—Erection of an oriel window at a proposed building upon the site of Nos. 1 to 3, Great Tower-street, City (Mr. E. Stones).—Consent.

Fulham.—Erection of an iron and glass addition over the porch at No. 12, Ongar-road, Fulham, abutting upon the southern side of Sedlescombe-road (Mr. J. Benattar).—Consent.

Hammersmith.—Erection of an addition at No. 231, Hammersmith-road, Hammersmith, to abut upon Great Church-lane (Mr. J. E. Ashby for the London General Omnibus Company, Ltd.).—Consent.

Lewisham.—Erection of buildings on the southern side of Catford-hill, Lewisham, to abut also upon the western side of Creelandgrove (Messrs. Norfolk & Prior).—Consent.

Marylebone, East.—The erection of an addition at No. 23 Woronzow-road, St. John's Wood (Messrs. Burgess & Myers for Mrs. H. Caird).—Refused.

St. George, Hanover-square.†—The retention of a three-story oriel window in front of No. 48, South Molton-street, St. George, Hanover-square (Messrs. Watson & Thorp for Mr. F. Newland-Pedley).—Consent.

St. Pancras, South.—Erection of projecting illuminated signs at the Tottenham Court-road and Warren-street entrances to No. 134, Tottenham Court-road, St. Pancras (Messrs. Bennett & Stratton for the National Theatres de Luxe, Ltd.).—Consent.

Wandsworth.—A further deviation from the plan approved for the erection of buildings on the south-eastern side of Mitcham-lane, Streatham, to abut also upon the north-eastern side of Blegborough-road, so far as relates to the erection of a brick enclosed staircase (Mr. J. Harding).—Consent.

Westminster.—The erection of a projecting sign in front of Electric Railway House, York-street, Westminster (Mr. H. W. Ford for the Metropolitan District Railway Company).—Consent.

Width of Way.

City of London.†—Erection of a one-story building at Nos. 4 to 7, Red Lion-court, Fleet-street, City, at less than the prescribed distance from the centre of Johnson's-court (Mr. W. H. Waterman).—Consent.

Width of Way and Lines of Frontage.

Greenwich.—The erection of a vestry hall addition to Holy Trinity Church, to abut upon the eastern side of Maidenstone-hill, Blackheath (Mr. J. S. Beard).—Consent

Width of Way, Frontage, Cubical Extent, and Uniting of Buildings.

Paddington, South.—The erection of a building upon a site abutting upon Queen's-road, Douglas-place, and Porchester-gardens, Paddington, and the erection of such building with divisions exceeding 250,000 cubic ft. in extent, with division wall openings exceeding the size specified, and with steel revolving shutters to such openings (Messrs. John Belcher, R.A., and J. J. Joass).—Consent.

Lines of Frontage and Construction.

Hampstead.—The erection of a wood and iron motor house at No. 6, Briardale-gardens, Hampstead, to abut upon Clorane-gardens (Mr. S. C. Lathbridge for Mr. R. W. Wimbush).—Refused.

Islington, North.—The retention of a wood and iron building of a temporary character on the northern side of Seven Sisters-road, Islington, adjoining No. 133, Seven Sisters-road (Mr. H. Goodchild for Mr. Robinson).—Consent.

Wandsworth.—The erection of a wood and iron shed at the rear of No. 106, Lavenham-road, Wandsworth, abutting upon Trentham-road (Shorthorn Dairies, Ltd.).—Refused.

Width of Way, Frontage, and Construction.

St. Pancras, North.—The erection of a wood and iron building of a temporary character on the eastern side of Gillies-street, St. Pancras, northward of Franklin-street (Mr. W. Harbrow for Mr. C. Pitman).—Consent.

Space at Rear.

St. George, Hanover-square.—The erection of a bay window upon the space at the rear of a house to be erected upon a site at the rear of No. 36, Belgrave-square, St. George, Hanover-square (Mr. F. W. Foster).—Refused.

Wandsworth.—A modification of the provisions with regard to open spaces about buildings, so far as relates to the proposed erection of four houses on the eastern side of Geraldine-road, Wandsworth, with irregular open spaces at the rear (Messrs. Bartlett & Ross for Mr. J. Soper).—Consent.

Space at Rear and Alteration of Building.

St. George, Hanover-square.—The erection of an addition at the rear of No. 36, Belgrave-square, St. George, Hanover-square (Mr. F. W. Foster).—Consent.

Alteration of Building.

Westminster.—An additional story at No. 122, Victoria-street, Westminster (Messrs. C Heathcote & Sons).—Consent.

Cubical Extent.

Clapham.—The erection upon a site abutting upon Lavender-hill, St. John's-road, and Ilminster-gardens, Clapham Junction, of a building with a division exceeding 250,000 cubic ft. in extent, and the formation of openings in division walls exceeding the size permitted, and also the construction of the double iron doors to be provided to such openings (Messrs. Gibson, Skipwith, & Gordon for Messrs. Arding & Hobbs).—Consent.

Uniting of Buildings.

City of London.—The formation of further openings between Nos. 5 and 6, Idol-lane, City (Messrs. Hall, Beddall, & Co.).—Consent.

Finsbury, East.—The retention of an opening between Nos. 5, 6, and 7, and Nos. 8 and 9, Glasshouse-yard, Aldersgate-street (Mr. E. Stones).—Consent.

Islington, North.—The retention of 9-in. brickwork as the filling in of a party wall opening between buildings at the rear of No. 61, Tollington-park, Islington (Messrs. D. de Meza & Son).—Refused.

Whitechapel.—The retention of openings between Nos. 138 and 140, Commercial-street, Whitechapel (Messrs. Holbrooks, Ltd.).—Consent.

The recommendations marked † are contrary to the views of the metropolitan borough councils concerned.

APPOINTMENTS.

APPOINTMENT OF SANITARY OFFICER.

The Local Government Board has sanctioned the appointment of Miss G. Davis as sanitary inspector in the Metropolitan Borough of Greenwich.

MANCHESTER SHIP CANAL.

Mr. W. Henry Hunter, M.Inst.C.E., who for fifteen years has held the position of chief engineer of the Manchester Ship Canal Company, has, we understand, resigned, and has been appointed consulting engineer to the company in the place of the late Sir E. Leader Williams. Mr. Hubert Congreve, the assistant engineer, has been appointed to succeed Mr. Hunter as chief engineer of the company.

GENERAL BUILDING NEWS.

CHURCH, WIDNES.

The Bishop of Liverpool has just consecrated the new parish church of St. Mary's, Widnes. The church consists on plan of nave, chancel, north and south aisles, western tower opening into nave and aisles by lofty arches and forming baptistry and main exit, north and south transepts with porches, organ chamber opening into north transept and chancel, south chapel, choir vestry (also forming parish room), and clergy vestry, with lavatory and offices attached. The church is built of flecked red stone, the roofs covered with red Ruabon tiles (except aisles, which are leaded). The floors of aisles and chancel are tiled, the nave passage and porches flagged, and the seat blocks, organ chamber, chapel, and vestry floors laid with wood blocks. There is sitting accommodation for 770 worshippers. The contractors have carried out the work under the supervision of the architects (Messrs. Austin & Paley, of Lancaster), Mr. T. Barnes acting as clerk of works. The builders of the edifice are Messrs. R. Rathbone & Sons, of Atherton. The morning chapel is screened from the chancel and aisle by carved oak screens. The pulpit is of stone, with marble coping.

SCHOOLS, TORPOINT.

New Council schools have been opened at Torpoint. The schools have been erected on a pleasant site overlooking the Hamoaze, and will accommodate 192 boys, 192 girls, and 180 infants, a total of 564. The old school provided for 540 scholars. The cost of the new buildings, including the land, is about 6,000*l*. The architect is Mr. B. C. Andrew, of St. Austell, the contractor Mr. W. B. Bennett, and the clerk of works Mr. R. Tiddy.

NURSES' HOME, SALOP INFIRMARY, SHREWSBURY.

A new nurses' home has been erected at Shrewsbury by Mr. Harry Price, of Shrewsbury, from the designs of Mr. Lloyd-Oswell. It is a five-story structure, built of pressed bricks, with Grinshill stone dressings. Accommodation is provided for about fifty people. There are several large sitting-rooms, a writing-room, and a bicycle-room. All the corridors, bathrooms, etc., have terazzo flooring, and the building is fireproof throughout.

ENGINEERING LABORATORIES, UNIVERSITY OF LIVERPOOL.

New laboratories are in process of erection at the University. The new building is in the form of an L-shaped block, four stories in height, projected from the north side of the Walker Engineering Laboratories, and in the internal angle between the higher buildings is the new boiler house, one story in height. Through communication between the existing laboratory and the new building will be made at every floor. The exterior walls will be of grey brick with red stone facings, and the roofs will be covered with Burlington slates. The site on which the laboratories are being built was formerly a stone quarry, filled up with quarry refuse so loosely packed that it was found necessary to carry the foundations down to the rock, which is at an average depth of about 40 ft. below the basement floor level. This has been done by means of concrete piers, along the tops of which run continuous concrete beams carrying the main walls. The main entrance to the new building is on the north side, and leads directly to the principal staircase, which continues down to the basement floor and upwards to the first and second floors. From the second floor a secondary stair gives access to the roof, on which, over

the principal staircase, will be placed a cast-iron tank of 10,000 gallons capacity for storing water for experimental purposes. At each floor corridors run east and west from the staircase, giving access to the various rooms. The laboratories are being erected at a cost, including equipment, of 35,000*l*. Messrs. Jones & Sons were the contractors for the foundations, and Messrs. Joshua Henshaw & Sons are the general contractors, and the architects are Messrs. Briggs, Wolstenholme, & Thornely.

NEW WING TO BECKETT HOSPITAL, BARNSLEY.

Extensions are in progress at the Beckett Hospital at Barnsley, to meet the pressure of the times, the main feature of the present scheme being the Marshall Wing, of which Earl Fitzwilliam recently laid the foundation-stone. The general scheme remodels and extends the whole institution, and will link up the various departments into a comprehensive plan. An expenditure of 7,500*l*. has been embarked upon. The construction of the Marshall Wing is really the completion of what is called the Kendray block. By the completion of this block thirty-six additional beds on two floors and two single-bed wards will be added to the accommodation of the hospital. The structure will be of brick to harmonise with the rest. A sanitary spur is provided on each floor, and separated from the wards by "cut-off" lobbies. In the high-pitched roof of this block accommodation is provided for seven maids' bedrooms, with separate fireproof staircase. Various enlargements and improvments will be made to the ward kitchens and bathrooms in the Kendray block. Besides this new wing, a central kitchen block is in course of erection, and it will include a sterilising-room opening into the existing operating theatre. A new push-button electric lift will be placed on the main corridor, and all the existing hand-power lifts will be pulled out. The first floor of this block provides accommodation for doctors' test-room, surgical stores, and a small steam-drying room, a sewing-room, and spare bedroom. The old kitchens are to be converted into a recovery ward, to accommodate six beds. The extensions and alterations are being carried out from the designs of Messrs. George Moxon & Son.

BUILDING IN PAISLEY.

Dean of Guild Henderson, who presided at the Paisley Dean of Guild Court recently, made a statement regarding the building trade in Paisley during the past year. There had been, he said, fifty-nine cases brought before the Court for disposal, as compared with seventy-four the previous year, and the valuation, 80,670*l*., showed a decrease of 9,590*l*. In the classification of property passed there were eight four-story tenements, seven three-story tenements, and thirteen villas and cottages, besides halls and public buildings, and the remainder were made up of alterations and additions to property and public works. Permits were granted in twenty-seven minor cases by the Master of Works, Mr. James Lee, in virtue of the powers conferred by the Paisley Police Act, 1901.

TRADE NEWS.

With reference to the article in our issue of November 5 on the German Y.M.C.A. and shops, City-road, E.C., of which Messrs. L. Whitehead & Co., Ltd., of Clapham, were the builders, the whole of the Portland stone was supplied and fixed by Messrs. Fox & Co., stone merchants and general masons, being worked in their yard at Hammersmith.

The St. Pancras Iron Work Company, Ltd., supplied and fixed the iron fire doors and ladders under London County Council requirements for the Little Theatre, Adelphi, illustrated in our last issue.

The Brightside Foundry and Engineering Company, Ltd., of Sheffield, London, and Birmingham, have secured from the War Office the contract for the new steam generating plant and complete centralised heating installation at the balloon factories, offices, and dirigible shed at South Farnborough, Hants.

The Grafham Church Schools, Guildford, are being supplied with Shorland's patent Manchester grates, patent ridge ventilators, and special inlet ventilators, supplied by Messrs. E. H. Shorland & Brother, Ltd., of Failsworth, Manchester.

STAINED GLASS & DECORATION.

WINDOW, TILLINGTON CHURCH, PETWORTH.

A fine two-light window has just been erected in this church by Messrs. Percy Bacon & Brothers, of London, and represents angels with musical instruments. Effect has been obtained by the use of simply white glass with black and gold, the only relief being the background, which is composed of broken jewelly bits of colour.

SANITARY AND ENGINEERING NEWS.

WATER SUPPLY, WARRINGTON.

Mr. R. G. Hetherington, A.M.Inst.C.E., an inspector of the Local Government Board, held an inquiry at Warrington on the 11th inst. into the application of the Corporation for sanction to borrow the sum of 23,799*l*. for the purpose of their water undertaking, including the execution of certain works in the townships of Burtonwood and Winwick-with-Hulme. Mr. A. T. Hallaway, Deputy Town Clerk, explained that there were three systems of water supply—a trade supply, a low-level supply, and a high-level supply. The second named at the present time was supplied by an 18-in. main, which was being overworked, and the proposal was to lay another 18-in. main, giving 3,000,000 gallons per day, or a maximum of 242,000 gallons per hour. That, they estimated, would be ample for the districts requirements for very many years to come. Evidence in support of the application was given by Mr. Gray, Water Engineer.

MISCELLANEOUS.

PROFESSIONAL AND BUSINESS ANNOUNCEMENT.

Mr. H. Harmsworth and Mr. H. Cecil Walker have joined the board of directors of Messrs. R. Waygood & Co., Ltd., makers of lifts and cranes, Falmouth-road, London, S.E.

A HOME OF SIR G. G. SCOTT.

A tablet has been affixed on the front of The Grove, Hampstead, to commemorate the residence there of Sir Gilbert Scott.

TAPESTRY, WESTMINSTER ABBEY.

The recent anniversary of the festival of St. Edward the Confessor has been commemorated by Mr. Henry Yates Thompson's gift of a large piece of tapestry, woven by Messrs. Morris & Co., after a drawing made by Mr. Tristram. For the drawing Mr. Tristram, who has done similar work from old paintings on screens in Norfolk, followed the picture of St. Edward painted in or about 1308 on the back of the sedilia in the choir. The figure, some 6 ft. in height, represents the Confessor, crowned, with halo and pilgrim's ring.

SAND FIRE-EXTINGUISHING EQUIPMENT.

A sand fire-extinguishing equipment, for use in motor garages, has recently been introduced by Messrs. Merryweather & Sons, of Greenwich. It comprises a three-wheeled sand truck, constructed of stout galvanised sheet steel, and holding about 6 cwt. of sand. The sand can be taken from the top, hinged covers being provided to open from either end, or it can be shovelled into a bucket from the side, in which a sliding panel is fitted. When the sliding panel is raised, a peg is inserted in a hole in the side of the truck to prevent the panel from dropping down. A fibre bucket is carried on a bracket at the back, and two strong wooden spades are supported on suitable iron brackets at the side. In another form the sand bin is of larger capacity (holding about 8 cwt. of sand), and is mounted on legs instead of wheels. It is equipped with two fibre buckets and two spades, and has a hinged cover at the top and a sliding panel at the side.

THE TURIN EXHIBITION.

A large number of applications has been received for space in the British Industrial Court at the Turin Exhibition, and there is promise of a representative display of the various industries of this country. At the meeting of the Association of Chambers of Commerce of the United Kingdom it was resolved that, "in view of the success which has attended the collective exhibits of the Chambers of Commerce at the Brussels Exhibition, and their effectiveness in directing attention to the staple industries of this country, the Association strongly recommends all the Chambers representing manufacturing industries to organise collective displays of their products, in addition to the industrial exhibits of their members for the Turin Exhibition to be held next year."

MR. GRIBBLE'S HISTORIC SCENES.

Mr. Bernard F. Gribble's interpretations of historic scenes are well known and popular features of the Royal Academy and other exhibitions. Two of his decorative compositions—"The *Victory* at the Battle of Trafalgar" and the "Embarkation of Henry VIII. on Board the *Great Harry* from Dover"—have been reproduced in colours and published by Messrs. Landeker & Brown (price 5s. each), and these colour plates, 18 in. by 12½ in., are pleasant reminders of the original pictures.

OFFICES FOR KENT COUNTY COUNCIL.

Mr. Frederick W. Ruck, the County Architect for Kent, has prepared plans for the new offices which are to be erected on the fore-court of the Sessions House, Maidstone. In his report to the Council, Mr. Ruck says that the building is designed in the Renaissance style, and will harmonise with the existing work. The rusticated work surrounding the archways and the plinths up to ground floor will be in grey granite; the central three-storied portion will be faced with Portland stone, and the wings of the building and the whole of the fronts facing the inner court will be in Kentish rag and Portland stone. The building will be of fireproof construction internally, the floors being in reinforced concrete and the staircases in stone. The cost of the building, including the alterations to the present waiting halls to the courts, treasurer's and indictment offices, etc., calculated upon the estimated contents of 948,000 cubic ft. at 12d. per foot, will be 47,400*l*. The plans are to be carried out under Mr. Ruck's supervision. Under the scale fixed by the Royal Institute of British Architects, which usually prevails, the architect's commission on total outlay is 5 per cent., and the commission for preparing quantities and adjusting on completion is 1½ per cent. The terms proposed (which are agreed to by Mr. Ruck) amount, the Committee state in conclusion, to rather less than two-thirds of what would be payable in the usual course.

ROYAL HIBERNIAN ACADEMY OF ARTS.

Mr. T. Manly Deane, B.A., Fellow of the Royal Institute of the Architects of Ireland, and Mr. William J. Leech have been elected Academicians of the Royal Hibernian Academy of Arts.

PATENTS

APPLICATIONS PUBLISHED.*

22,586 of 1909.—Robert Henry Martin: Means for weighing the loads lifted by cranes and derricks.

23,894 of 1909.—William Alvery Vessey: Stays for casement windows.

24,193 of 1909.—William Edward Lake (Grand Rapids Veneer Works): Method of drying lumber.

24,213 of 1909.—J. Osman & Co., Ltd., and Francis Fidler: Continuous kilns for burning bricks, tiles, pipes, and terra-cotta goods.

24,346 of 1909.—William Henry Poate, Frederick William Poate, and Fawcett, Preston, & Co., Ltd.: Hydraulic presses.

24,700 of 1909.—James Dawson & Son, Ltd., and James Dawson: Conveyor belts.

24,879 of 1909.—Edward Bright and William James Howard: Hinges for doors, gates, and the like.

24,957 of 1909.—Amos Sunderland and William Thorn: Door checks.

25,369 of 1909.—Gersh Schmidt.—Devices for opening, closing, and fixing double windows.

25,909 of 1909.—Victor Löwendahl: Process of manufacturing porous metal blocks.

26,890 of 1909.—George Parsons Banbury: Mechanically-operated revolving building.

29,196 of 1909.—Henry Porter Smith: Domestic washing machines.

285 of 1910.—James Collins: Hand tool for bending pipes.

571 of 1910.—George Weddenburn Hume: Grips for use in connexion with blind and other cords.

3,067 of 1910.—John William Woolnough: Window and the like opening and closing apparatus.

6,600 of 1910.—Samuel Wilson Drury: Mechanism for lifting, hauling, and other analogous purposes.

7,155 of 1910.—Luigi Cecchi: Manufacture of artificial stone or plates and other cement agglomerates.

7,485 of 1910.—George Wragge, Ltd., Charles Ermen, and George Ermen: Casement window stays.

8,737 of 1910.—Robert Lindenthal: Machines for moulding artificial stones, concrete blocks, and bricks.

12,177 of 1910.—William Gerhardt Friedrich Siegmann: Composition for building, manufacturing, and the like purposes.

13,122 of 1910.—Grosvenor Atterbury: Processes and apparatus for moulding or casting hollow blocks.

15,375 of 1910.—Dolphus Kiser: Wrenches.

18,893 of 1910.—Thomas Edward Hall: Bridle for paint brushes.

20,919 of 1910.—William Merrilees Baird and William Warrand: Fireproof flooring.

* All these applications are in the stage in which opposition to the grant of patents upon them can be made.

List of Competitions, Contracts, etc.

For some Contracts still open, but not included in this List, see previous issues. Those with an asterisk (*) are advertised in this Number: Competition, iv; Contracts, iv. vi. viii. x.; Public Appointments, xx. and xxi.; Auction Sales, xxvi.

Certain conditions, beyond those given in the following information, are imposed in some cases, such as: the advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bonâ-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in.

***** It must be understood that the following paragraphs are printed as news, and not as advertisements; and that while every endeavour is made to ensure accuracy, we cannot be responsible for errors that may occur.**

Competitions.

NOVEMBER 29.—**Bangor, Co. Down.**—SEA-WATER BATHS.—The Bangor U.D.C. invite designs for baths to be built on the foreshore in conjunction with the existing sea-water pond at Pickie, at a cost of 7,050*l.* Premium 50*l.*, or to be merged into commission of 5 per cent. For further particulars apply to Mr. J. Milliken, Clerk to the Council, and see advertisement in issue of August 20.

NOVEMBER 30.—**Romford.**—The Town Planning and Modern House and Cottage Exhibition invite designs for gardens to houses and cottage, also perspective drawings suitable for reproduction. For further particulars see advertisement in our issue of September 17, and of October 8.

DECEMBER 1.—**Dublin.**—New pavilion to the Royal Hospital for Incurables at Donnybrook. Open only to architects practising in Dublin. Premia 100*l.* (to be merged), 30*l.*, and 20*l.* Conditions on application to the Registrar.

DECEMBER 1.—**Manchester.**—LAYING-OUT ESTATE.—The Manchester Corporation invite designs for laying-out their Blackley Estate. Three premiums are offered, viz., 150*l.*, 100*l.*, and 50*l.* See our issue of September 3, page 264, for further particulars.

DECEMBER 5.—**Rhosneigr, Anglesey.**—WATER AND SEWERAGE SCHEMES.—The Valley R.D.C. invite plans and specifications, in competition. Mr. Owen J. Hughes, Clerk to the Valley R.D.C., Bryncubelyn, Llanerchymedd, Anglesey. See previous announcements, October 29—November 12.

DECEMBER 14. — **Douglas, Isle of Man.** — The owners of the Villa Marina invite designs for the erection of a pavilion and the laying out of a pleasure gardens, etc. The sum to be spent on the work is 16,000*l.* See our issue of November 5, page 563, for further particulars.

JANUARY 14, 1911.—**Knightsbridge.**—Complete particulars of a competition for remodelling part of the Trevor Estate, Knightsbridge, will be found on page xvi. of our issue of October 15.

JANUARY 15, 1911.—**Berlin.**—The laying out of Rudesheim Square. Particulars gratis from the Direktion der Gesellschaft, Charlottenstrasse 60. See "Competition News" in this issue.

* MARCH 1, 1911.—**Coventry.**—MUNICIPAL OFFICES.—The Coventry Corporation invite competitive designs for erection of Municipal offices. See advertisement in this issue for further particulars.

MARCH 15, 1911.—**San Salvador.**—SCHEME FOR A CITY THEATRE.—First premium, 8,000 francs; second, 4,000 francs. Particulars from Mr. M. J. Kelly, 8, Idol-lane, E.C.

MARCH 31, 1911.—**Romford.**—The Town Planning and Modern House and Cottage Exhibition invite designs for the general plan of Gidea Park, Squirrels Heath, Romford. For further particulars see advertisement in our issue of September 17, and of October 8.

MARCH 31, 1911.—**Trondhjem, Norway.**—PROPOSED HARBOUR AND RAILWAY EXTENSION.—Competitive designs for above are invited by the Joint Committee of the State Railways and the City Harbour Commissioners. See our issue of November 5, page 563, and that of October 15, page 444, for further information.

NOVEMBER 1, 1911.—**City of St. Petersburg.**—MONUMENT TO ALEXANDER II.—Particulars in our issue of August 13, 1910.

NO DATE.—**Rio de Janeiro.**—The Chamber of Deputies of Brazil contemplate the erection of a Faculty of Medicine, with a clinical hospital, in Rio de Janeiro. Conditions may be seen at the Office National due Commerce, 3, Rue Feydean, Paris.

Contracts.

BUILDING.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in.

NOVEMBER 21. — **Guildford.** — SHEDS, ETC. — The R.D.C. invite tenders for the erection of a steam road roller shed and stores and fencing on the Pound Field Estate, Stoke. Plans, etc., can be seen, and full particulars obtained, upon application to the Council's Engineer, at the offices of the Council, in Commercial-road, Guildford.

NOVEMBER 21.—**Holt.**—LAYING-OUT CEMETERY.—The Burial Board invite tenders for (1) the erection of boundary wall, shelter, and shed; and (2) forming paths, etc., of a new cemetery. Plans, etc., can be seen, and quantities obtained, on application to Messrs. A. F. Scott & Son, architects and surveyors, 24, Castle-meadow, Norwich.

NOVEMBER 21.—**Pant.**—HOUSES.—For the erection of eight large houses for the Pant Building Club. Drawings, etc., may be seen at the offices of Mr. J. Llewellin Smith, M.S.A., architect, Aberdare.

NOVEMBER 22. — **Bishop Auckland.** — BOUNDARY WALLS AND IRON FENCE.—The Guardians invite tenders for the building of boundary walls and the erection of an iron fence on land adjoining the Workhouse. Full particulars may be obtained on application to Mr. F. H. Livesay, architect, Bishop Auckland.

NOVEMBER 22.—**Dandaleith.**—REBUILDING.—For rebuilding part of steading at Overton of Elchies, Dandaleith. Plans, etc., may be seen at the Seafield Estate Offices in Elgin and Rothes.

NOVEMBER 22.—**Foleshill.**—HOME FOR CHILDREN.—The Board of Guardians invite tenders for the erection of a home for children in Lythall's-lane. Plans, etc., may be seen, and quantities obtained, on application to the architect, Mr. A. E. Newey, at the Union Offices, on payment of 2*l.* 2*s.*

NOVEMBER 22.—**Leeds.**—ALTERATIONS AND REBUILDING.—Tenders are invited for proposed alterations and rebuilding of premises for the Gas Department, in Meadow-lane. Drawings, etc., can be seen, and a form, etc., obtained, at the office of Mr. W. T. Lancashire, City Engineer, Municipal Buildings, Leeds, on deposit of 3*l.* 3*s.*

NOVEMBER 23. — **Rochdale.** — WALLING. — The General Purposes Committee invite tenders for the construction of parpoint-faced walling, etc., and rubble retaining wall at Falinge Park. Plans may be seen, and quantities obtained, at the office of the Borough Surveyor.

NOVEMBER 24. — **Carbis Bay.** — ALTERATIONS AND ADDITIONS TO HOTEL.—For alterations and additions to the Carbis Bay Hotel. Plans, etc., can be seen at the hotel, and also at the offices of the architects, Messrs. Cowell & Cowell, Newquay, from whom forms of tender must be obtained.

NOVEMBER 24.—**Grantown-on-Spey.**—REPAIRS.—For repairs at the Court-house and police buildings. Plans, etc., may be seen at the Police Office, and with Mr. John Wittet, architect, Elgin.

NOVEMBER 25. — **Edinburgh.** — TEMPORARY SCHOOL BUILDING.—The School Board invite tenders for the various works connected with the erection of a temporary building of wood and iron, at Fountainbridge. Plans may be seen, and other information obtained, at the School Board Offices, Castle-terrace.

NOVEMBER 25. — **Gelli.** — SCHOOL. — The Rhondda U.D.C. invite tenders for the erection of the Bronllwyn School, to accommodate 400 mixed and 400 infant scholars. Plans, etc., may be seen, and quantities, etc., obtained, at the office of the architect, Mr. Jacob Rees, Hillside Cottage, Pentre, upon the production of a receipt from the Accountant of the Council for deposit of 2*l.* 2*s.*

* NOVEMBER 25. — **Pitsea.** — SCHOOL.—The Essex Education Committee invite tenders for erection of an elementary school for 264 children. See advertisement in this issue for further particulars.

NOVEMBER 25.—**Sheriffbrae, Forres.**—DWELLING-HOUSES.—For the erection of semi-detached dwelling-houses. Plans, etc., may be seen with Mr. Wm. Kirkland Cutlar, architect, 1, St. Catherine's-road, Forres.

NOVEMBER 25.—**South Brent, Devon.**—HALL.—For the erection of a hall at South Brent, S. Devon. Plans may be seen, and quantities obtained, at the office of Mr. R. Hansford Worth, 42, George-street, Plymouth.

NOVEMBER 25.—**Worksop.**—COTTAGES.—For erection of ten pairs of cottages on land at the Co-operative Garden City, Kilton-road, Worksop, for the Worksop Co-operative Society, Ltd. Plans, etc., may be seen at the office of Mr. E. Allsopp, architect and surveyor, Sherwood-road, Worksop. Quantities not supplied.

NOVEMBER 26.—**Bedwellty.**—BUILDING WORK AND PAVING.—The U.D.C. invite tenders for (1) supplying, etc., kerb and channelling, and forming footpath in High-street, Blackwood; (2) erecting a four-stall public urinal (Duckett's or other approved pattern) at Aberbargoed; (3) erecting a brick disinfector house at Coedymoeth Isolation Hospital. Plans, etc., may be seen on application in writing to the Council's Surveyor, Mr. J. H. Lewis, A.M.Inst.C.E., Blackwood, Mon.

NOVEMBER 26. — **Chadderton.** — ALTERATIONS TO SCHOOL.—The Education Committee invite tenders for works required at Eustace-street School. Form of contract may be seen, and specification obtained, at the offices of Mr. J. Whitehead, Clerk to the Committee, Education Offices, Chadderton.

NOVEMBER 26.—**Pantywaun.**—ALTERATIONS.—For the altering of the Royal Arms, for Messrs. A. Buchan & Co., Rhymney. Plans, etc., may be seen either at the Royal Arms, Pantywaun, or at the office of Mr. T. Roderick, architect, Ashbrook House, Aberdare, where quantities may be obtained.

NOVEMBER 26. — **Wheatley Hill.** — CO-OPERATIVE PREMISES.—For the erection of new premises for the Sherburn Hill Co-operative Society, Ltd. Names to the architect, Mr. J. Walton Taylor, F.R.I.B.A., St. John-street, Newcastle-upon-Tyne.

NOVEMBER 28. — **Hellesdon, Norwich.**—SANITARY ACCOMMODATION.—The Asylum Committee invite tenders for the erection of additional water-closet accommodation at the City Lunatic Asylum. Plans, etc., may be seen, and specifications, etc., obtained, on deposit of 5*l.*, at the office of Mr. Arthur E. Collins, M.Inst.C.E., City Engineer, etc., Guildhall, Norwich.

NOVEMBER 28.—**West Fife.**—HOSPITAL EXTENSIONS.—The West Fife, etc., Infectious Diseases Joint Hospital Committee invite tenders for the work in connexion with the extensions of the Hospital. Schedules on application to Mr. William G. D. Simpson, Clerk to the Committee, 24, New-row, Dunfermline, and on deposit of 1*l.* 1*s.* for each schedule. Plans may be seen either at the office of the architect, Mr. E. Simpson, 16, King-street, Stirling, or at the office of the measurers, Messrs. Douglas & Wright, I.M., 6, High-street, Dunfermline.

NOVEMBER 29. — **Chatham.** — DWELLING-HOUSES, SHOPS, ETC.—The Trustees of Richard Watts's Charity at Rochester invite tenders for the demolition of Nos. 99 and 101, High-street, and the erection on the site of two shops and dwelling-houses. Plans, etc., may be seen at the office of Mr. J. W. Nash, the Trustees' Architect, No. 237, High-street, Rochester, where quantities and forms may be obtained.

NOVEMBER 29. — **Harrington, Cumberland.** — WALL.—The U.D.C. invite tenders for building a stone wall round the site of the proposed cemetery at West Ghyll End. Plan, etc., may be seen, and any further particulars obtained, on application to Mr. C. Eaglesfield, Surveyor, Gordon-street, Workington.

NOVEMBER 29.—**Ware.**—ADDITIONS, ETC., AT PUMPING STATION.—The U.D.C. invite tenders for (1) additions to Engineer's cottage; (2) alterations to screening chamber of reservoir, at Stanstead Pumping Station. Specifications, etc., can be obtained on application to the Surveyor to the Council, Mr. H. Fox Hill, Town Hall, Ware.

NOVEMBER 30.—**Aberfan.**—HOUSES, ROADS, ETC.—For the erection of twelve houses, together with the construction of roads, etc., for the Grove Building Club No. 2. Plans, etc., can be seen at the office of Mr. T. Edmund Rees, architect and surveyor, Merthyr Tydfil.

NOVEMBER 30.—**Leeds.**—HOSTELS.—For the erection of two hostels for men students at the City of Leeds Training College, Beckett's Park, Headingley (contract No 3). Names, together with deposit of 2*l.* 2*s.*, to be sent at once to Mr. James Graham, Secretary for Education, Education Department, Calverley-street, Leeds.

NOVEMBER 30.—**Truro.**—NEW MILL.—For the erection of a new mill at Malpas-road, for Messrs. Hosken, Trevithick, Polkinhorn, & Co., Ltd. Drawings, etc., can be seen by appointment at the office of Mr Alfred J. Cornelius, M.S.A., architect, Truro, from whom quantities may be obtained on deposit of 2*l.* 2*s.*

* DECEMBER 2.—**London, S.W.**—EXTENSION.—The Commissioners of H.M. Works and Public Buildings invite tenders for new public offices, Westminster, extension, first contract, foundations, vaults, etc. See advertisement in this issue for further particulars.

* DECEMBER 5.—**Barnet.**—COTTAGES.—The Barnet U.D.C. invite tenders for twenty-nine cottages in May's-lane, Barnet. See advertisement in this issue for further particulars.

DECEMBER 5.—**Lymm, Cheshire.**—ADDITIONS, ETC., TO GRAMMAR SCHOOL.—For alterations and additions to Lymm Grammar School. Plans etc., can be seen at the office of Mr. H. Beswick, F.R.I.B.A., County Architect, Newgate-street, Chester, on or after the 21st inst., and quantities obtained on deposit of 1*l.*

DECEMBER 6. — **Swansea.**—WORKING-CLASS DWELLINGS.—The Corporation invite tenders for the erection of (*a*) fifty houses at Cwm-road; (*b*) fifty-three houses at Trewyddfa Common, Plasmarl. Plans, etc., may be seen, and form obtained, at the offices of the Borough Estate Agent, 3, Prospect-place, Swansea, upon deposit of 3*l.* 3*s.*

DECEMBER 8. — **Welshpool.** — SCHOOL ADDITIONS.—The Governors of the County School's invite tenders for the erection of certain additions to the County schools. Drawings, etc., may be seen on application to Messrs. Shayler & Ridge, architects, Oswestry and Welshpool, from whom quantities and forms may be obtained on payment of 1*l.* 1*s.*

DECEMBER 10.—**Buxton.**—ALTERATIONS.—The Derbyshire Education Committee invite tenders for proposed alterations to Old Wye House. Drawings, etc., may be seen at the office of the architect, Mr. George H. Widdows, A.R.I.B.A., St. Mary's-gate, Derby, from whom quantities, etc., can be obtained upon payment of 1*l.* 1*s.*

NO DATE. — **Bradford.** — ADDITIONS TO FACTORY.—For the various works required in the additions to paper tube works, Thornbury-road. Names at once to Mr. Sam Spencer, architect, etc., Old Bank-chambers, Great Horton, Bradford.

BUILDING—*continued.*

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in.

NO DATE.—**Bude.**—HOUSE.—For the erection of a house on the Paize and Well Estate. Names to Messrs. Hatchard-Smith & Son, F.R.I.B.A., architects, 76, Watling-street, London, E.C.

NO DATE.—**Hartlepool.**—REBUILDING.—For pulling down and rebuilding Golden Anchor Inn. Plans may be seen, and quantities obtained, on deposit of 1*l.* 1s., from Mr. M. Procter, architect, 29, Church-street, West Hartlepool.

NO DATE.—**Nottingham.**—INFIRMARY.—Erection of the new Nottingham and Midland Eye Infirmary, The Ropewalk. Written application to be made to Mr. Arthur Marshall, A.R.I.B.A., architect, King-street, Nottingham. Quantities supplied on deposit of 1*l.* 1s.

NO DATE.—**Porthcawl.**—ADDITIONS.—For additions to Seabank Hotel, Porthcawl, for Mr. J. Evans. Plans may be seen, and quantities obtained, on receipt of 1*l.* 1s. deposit, at the offices of Messrs. Cook & Edwards, architects, Masonic-buildings, Bridgend.

ENGINEERING, IRON, AND STEEL.

NOVEMBER 21.—**Dudley.**—GASHOLDERS.—The Dudley Gaslight Company invite tenders for the cutting out of an existing single lift gasholder and the supply and erection of a two-lift gasholder in existing tank, at the Gasworks. A limited number of sets of prints, together with copies of specification, to be had on application to Mr. T. E. Stillard, Secretary, Gas Offices, Gasworks, Dudley, on payment of 1*l.* 1s. per set.

NOVEMBER 22. — **India.**—RAILWAY MATERIAL.—The Directors of the Bengal and North-Western Railway Company, Ltd., invite tenders for the supply and delivery of rails, fishplates, etc., as per specifications to be seen at the company's offices. Mr. Alexander Izat, Managing Director, 237, Gresham House, Old Broad-street, London, E.C.

NOVEMBER 23.—**Bootle.**—WROUGHT-IRON RAILINGS AND GATES.—The Corporation invite tenders for the erection and completion of wrought-iron railings and gates in the South Recreation Ground. Plans, etc., may be obtained at the office of Mr. B. J. Mellenden, A.M.Inst.C.E., Borough Engineer.

NOVEMBER 23.—**Garforth, near Leeds.**—IRON HOSPITAL BLOCK.—Tadcaster R.D.C. invite tenders for the construction of a corrugated-iron administrative block, with drains and all other accessories, to their Infectious Diseases Hospital. Plans may be seen, and specifications and other information obtained from Mr. H. M. Driver, Sanitary Surveyor, Garforth, near Leeds.

NOVEMBER 29. — **Lambeth.**—WATER HEATER.—The Guardians invite tenders for the supply and fixing of a new multitubular water heater at their Renfrew-road Workhouse, Lower Kennington-lane, S.E. Specification, etc., may be obtained, upon payment of 2*l.*, from Mr. James L. Goldspink, Clerk, Guardians' Offices, Brook-street, Kennington-road, S.E.

NOVEMBER 29.—**Woodford.**—CORRUGATED-IRON SHED.—The U.D.C. invite tenders for the supply and erection of a corrugated iron cart-shed. Particulars and forms of tender may be obtained upon application to Mr. William Farrington, Surveyor to the Council, Council Offices, Woodford Green.

DECEMBER 1.—**Bradford.**—GAS RETORTS.—The Corporation invite tenders for the supply of gas retorts and of firebricks and fireclay required in the setting. Form of tender may be obtained on application to Mr. Chas. Wood, Gas Engineer, Town Hall, Bradford.

DECEMBER 1.—**Calcutta.**—CRANES.—The Calcutta Electric Supply Corporation, Ltd., invite tenders for the supply and erection at their Cossipore station and sub-stations, Calcutta, of overhead electric and hand travelling cranes, with rails, conductors, motors, &c. Copies of this specification (No. 9), etc., can be obtained from Mr. Francis R. Reeves, Secretary, the Calcutta Electric Supply Corporation, Ltd., Salisbury House, London-wall, E.C., on payment of a fee of 2*l.* 2s.

DECEMBER 1.—**Rhondda.**—CAST-IRON PIPES, ETC.—The U.D.C. invite tenders for the supply of cast-iron pipes, together with bends, specials, and fittings, in connexion with the main through Penrhondda Tunnel. Specification, etc., may be obtained at the office of Mr. Joseph Vevers, the Engineer, the Waterworks Office, Treherbert, Rhondda, upon production of a receipt, signed by the Accountant of the Council, for deposit of 2*l.* 2s. JANUARY 25, 1911.—**Dunedin, New Zealand.**—GAS PURIFIERS.—The City Corporation invite tenders for the supply and delivery at Dunedin of one complete set of purifiers. Plans, etc., may be seen at the offices of Messrs. Thomas Cole & Son, civil engineers, 11, Victoria-street, Westminster, S.W.

NO DATE. — **Wednesbury.** — DAMMING OFF AND BUILDING CANAL WALL.—For the damming off and building of about 60 ft. of canal wall. Full particulars of the work to be done can be obtained by applying to the Patent Shaft and Axletree Company, Ltd., Brunswick Works, Wednesbury.

MISCELLANEOUS.

NOVEMBER 21. — **Alfreton.** — SCAVENGING.—The U.D.C. invite tenders for scavenging by contract certain districts. Conditions, etc., may be obtained on application to Mr. J. Spencer, Sanitary Inspector, Council Offices, Alfreton.

NOVEMBER 21. — **Alfreton.** — TEAM WORK.—The U.D.C. invite tenders for team work. General conditions may be obtained at the office of Mr. R. F. Ward, Surveyor.

NOVEMBER 21. — **Edinburgh.**—DEMOLITION OF OLD BUILDINGS.—The Corporation invite tenders for the demolition of old buildings at Torphichen-street, according to plan which may be seen at the office of Mr. James A. Williamson, A.R.I.B.A., City-chambers, from whom specification, etc., may be had on personal application.

NOVEMBER 21.—**King's Norton.**—CONVERSION OF PRIVIES INTO WATER-CLOSETS. — King's Norton and Northfield U.D.C. invite tenders for the conversion of privies into water-closets, including the necessary drainage work in each case. Plans may be seen at, and specifications obtained from, the office of the Engineer and Surveyor to the Council, Mr. A. W. Cross, A.M.Inst.C.E., 23 and 25, Valentine-road, Kings Heath.

NOVEMBER 22.—**Cobham.**—COLLECTION OF HOUSE REFUSE.—The Epsom R.D.C. invite tenders for the removal of house refuse. A specification of the work and form can be seen on application to Mr. F. A. Pratley, Surveyor to the Council, Waterloo-road, Epsom, of whom full information can be obtained.

NOVEMBER 22.—**West Riding of Yorkshire.**—TABLES, ETC.—The West Riding Education Committee invite tenders for the supply of head teachers' pedestal writing tables, etc. Full particulars may be obtained on application to the Education Department (Elementary Branch), County Hall, Wakefield.

NOVEMBER 23.—**Audenshaw.**—REMOVAL OF REFUSE.—The U.D.C. invite tenders for the removal of nightsoil and refuse. Specifications, etc., can be had on application at the Council Offices, 2, Guide-lane, Audenshaw.

NOVEMBER 23.—**London.**—LIFT ROPES.—The Commissioners of His Majesty's Works and Public Buildings invite tenders for the supply of lift ropes. Form of tender and all particulars may be obtained from the Storekeeper, H.M. Office of Works' Stores, 12, Lambeth Palace-road, S.E.

NOVEMBER 23. — **Rhondda.** — STEAM ROLLER AND SCARIFIER.—The U.D.C. invite tenders for the supply of a 10-ton compound steam roller, with scarifier attached. Further particulars will be supplied upon application. Mr. W. J. Jones, Engineer and Surveyor, Council Offices, Pentre, Rhondda.

* NOVEMBER 25.—**London, E.C.**—WINDOW CLEANING.—The Commissioners of H.M. Works and Public Buildings invite tenders for window cleaning at the new General Post Office, King Edward's Building. See advertisement in this issue for further particulars.

NOVEMBER 26. — **Snodland.** — SCAVENGING.—The P.C. invite tenders for the dry scavenging of the parish. Particulars and conditions can be obtained on application at the office of Mr. Tom Hilder, Clerk to the Council, Pelham House, Snodland.

NOVEMBER 28.—**Cwmrydderch.**—JOBBING WORK.—Ebbw Vale Education Committee invite tenders (by a schedule of prices) for jobbing work at their Cwmrydderch School. Schedules (on deposit of 10s. 6d.) and any further information required may be obtained from the Committee's Architect, Mr. Henry Waters, at Market-chambers, Ebbw Vale.

* NOVEMBER 29.—**London, S.E.**—LIBRARY FITTINGS.—The Deptford B.C. invite tenders for supplying and fixing library fittings at New Cross Branch Library. See advertisement in this issue for further particulars.

NOVEMBER 29. — **Rochdale.**—PARK CHAIRS.—The Parks Committee invite tenders for 600 folding park chairs. For further particulars apply at the Borough Surveyor's Office, Town Hall.

NOVEMBER 29.—**Woolwich.**—REMOVAL OF ASHES AND REFUSE.—The London C.C. invite tenders for the removal of the ashes and bilge and boiler refuse from the Woolwich Free Ferry steamboats. Further particulars may be obtained from the Superintendent of the Ferry at the North Pontoon, Woolwich.

NO DATE.—**Fakenham.**—LAYING FLOORS.—For the laying down of complete floors, including one of rock maple, in connexion with the new Public Hall and Skating Rink. Particulars of work may be obtained from Mr. George Baxter, Motor Engineer, Fakenham.

PAINTING, etc.

NOVEMBER 19.—**Ipswich.**—COLOURING AND WHITEWASHING.—The Education Committee invite tenders for the inside colouring and whitewashing of certain schools, etc. Full particulars and specifications may be obtained on application to the Committee's Surveyor, Mr. E. T. Johns, Tower-chambers, Tower-street, Ipswich, on or before the 19th inst.

NOVEMBER 21. — **Portsmouth.** — PAINTING.—The Education Committee invite tenders for painting the outside of certain Council schools. Form of tender and all information may be obtained from the Surveyor, Mr. A. H. Bone, at his office, Cambridge Junction, Portsmouth.

NOVEMBER 22.—**Epsom.**—PAINTING, ETC.—The R.D.C. invite tenders for the painting of the ventilating columns in the parishes of Cheam, Cuddington, and Ewell. Full particulars, with forms, can be obtained of Mr. W. T. Wooldridge, Surveyor to the Council.

NOVEMBER 23. — **Manchester.** — PAINTING.—The Sanitary Committee invite tenders for painting at Baguley Sanatorium. Specification can be obtained at the office of the City Architect, Town Hall, upon payment of 10s. 6d. All cheques or postal orders are to be made payable to the order of the Corporation of Manchester.

NOVEMBER 30.—**Mansfield.**—PAINTING, ETC.—The Education Committee invite tenders for internal painting, etc., at the Rosemary and Pleasley Hill Mixed Schools. Specification, etc., may be obtained at the office of Mr. T. P. Collinge, A.M.Inst.C.E., Borough Surveyor, Exchange-row.

ROADS, SANITARY, AND WATER WORKS.

NOVEMBER 19-DECEMBER 2. — **Bromsgrove.**—ASPHALTING PLAYGROUNDS.—Worcestershire Education Committee invite tenders for laying portions of playgrounds of the Stourbridge-road Council School, Bromsgrove, with asphalt. Names to Mr. A. V. Rowe, architect, 30, Foregate-street, Worcester, not later than the 19th inst.

NOVEMBER 19-DECEMBER 2.—**Dodford.**—ASPHALTING PLAYGROUNDS.—Worcestershire Education Committee invite tenders for laying the playgrounds of the Council schools with asphalt. Names to Mr. A. V. Rowe, architect, 30, Foregate-street, Worcester, not later than the 19th inst.

NOVEMBER 22. — **Chislehurst.**—MAKING-UP.—The U.D.C. invite tenders for making-up Knoll-road. Forms, etc., can be obtained on application being made at the Council Offices, Church-row, between 9 and 10.30 a.m. and 2 and 3 p.m., on payment of the sum of 1*l.*

NOVEMBER 23.—**Cardiff.**—BRICK SEWER.—For the construction of an egg-shaped brick sewer in Penylan-road. Drawings, etc., may be seen, and form, with quantities, obtained, at the City Engineer's Office, in the City Hall.

NOVEMBER 23. — **Desford.** — SEWERAGE WORK.—Market Bosworth R.D.C. invite tenders for providing and laying earthenware socket pipe sewer, with the necessary manholes, and for the construction of settling tank, filter bed, etc., on the Charnwood Building Estate. Plans, etc., may be seen at the residence of Mr. W. M. Sykes, Surveyor to the Council, Ibstock.

NOVEMBER 23.—**Gosforth.**—REPAIRS TO CARRIAGEWAY.—The U.D.C. invite tenders for repairing the carriageway in Elmfield-road and Woodbine-road with tar-grouted macadam, and relaying channels and crossings, etc. Particulars may be obtained on application to the Engineer and Surveyor, Mr. George Nelson, A.M.Inst.C.E., Council Chambers, High-street, to whom application should be made for quantities.

NOVEMBER 24.—**Llantwit Pardre.**—ROAD WIDENING.—Llantrisant and Llantwit Fardre R.D.C. invite tenders for widening the district road near the Electric Power Station. Plans, etc., may be seen at the office of Mr. Thomas Saunders, Surveyor, School-street, Pontyclun, from whom the quantities may be obtained on deposit of 1*l.*

NOVEMBER 24.—**New Hartley, Seaton Delaval.**—SEWER.—The Tynemouth R.D.C. invite tenders for the construction of pipe sewer, together with the necessary manholes, etc. Plans, etc., may be seen at the office of Mr. A. S. Dinning, 21, Ellison-place, Newcastle-on-Tyne.

NOVEMBER 25. — **Alderley Edge.** — EXTENSION OF SEWERS.—The U.D.C. invite tenders for the construction of earthenware pipe sewers, together with the necessary manholes. Drawings, etc., may be seen (by appointment) at the office of Mr. Harold Sheldon, Surveyor, Council Offices, Alderley Edge, from whom quantities and form can be obtained on deposit of 1*l.*

NOVEMBER 25.—**Donnybrook.**—SEWER.—Pembroke U.D.C., Co. Dublin, invite tenders for the construction of main sewer near Auburn-avenue. Plans, etc., can be seen at the Town Hall, Ballsbridge, Pembroke, Co. Dublin.

NOVEMBER 25. — **Merton.** — MAKING-UP ROADS.—The U.D.C. invite tenders for making-up Meadow and Mill roads. Plans, etc., may be seen, and form obtained, on payment of 2*l.*, on application to Mr. G. Jerram, Surveyor, Council Offices, Merton.

NOVEMBER 26. — **Newcastle-on-Tyne.** — PIPE SEWER.—For the construction of pipe sewer at St. Anthonys. Plans, etc., may be seen at the office of Mr. A. S. Dinning, 21, Edison-place.

NOVEMBER 28.—**Kingsclere, Berks.**—SEWER, ETC.—The R.D.C. invite tenders for laying sewer and constructing eight manholes. Plans, etc., may be seen, and quantities obtained, at the office of Mr. John Barnes, Kingsclere, Newbury, on deposit of 2*l.* 2s.

NOVEMBER 28. — **Northwich.** — SEWERAGE AND SEWAGE WORKS.—The U.D.C. invite tenders for the construction of sewers, pumping stations, pumps, etc. (four contracts). Plans may be seen at the office of the Engineer, Mr. W. M. Beckett, A.M.Inst.C.E., 33, Brazennose-street, Manchester, from whom specifications, etc., may be obtained in payment of certain deposits.

NOVEMBER 28. — **Southgate.** — PUBLIC STREET IMPROVEMENTS.—The U.D.C. invite tenders for the execution of certain works of public street improvements in Cannon-hill. Plans may be seen upon application to the Council's Surveyor, Mr. C. G. Lawson, C.E., Council Offices, Palmer's Green, N., from whom specification, etc., may be obtained on depositing 2*l.* in cash.

NOVEMBER 28.—**Wareham, Dorset.**—NEW ROAD.—The Burial Acts Joint Committee invite tenders for the construction of a length of new road in connexion with extension of the present burial ground. For particulars apply to Mr. G. C. Filliter, Clerk to the Joint Committee, North-street, Wareham.

NOVEMBER 29.—**Gateshead.**—PAVING.—For paving Primrose-hill. Plans, etc., may be seen, and quantities obtained, at the office of Mr. N. P. Pattinson, Borough Surveyor, Town Hall, Gateshead.

NOVEMBER 30.—**New Hunstanton.**—MAKING-UP.—The U.D.C. invite tenders for making-up part of Crescent-road. Specification and plan can be seen, and particulars obtained, at the office of the Council's Surveyor, New Hunstanton.

DECEMBER 1. — **Dudley.** — DRAINAGE AND SEWAGE DISPOSAL.—The Guardians invite tenders for Workhouse sewage disposal and drainage works. Plans, etc., may be seen, and quantities, etc., obtained, upon application to Mr. Gains W. Coster, Clerk to the Guardians, Union Offices, St. James's-road, Dudley, and upon deposit of 1*l.* 1s.

DECEMBER 1.—**Dunstable.**—SEWAGE WORKS.—The Corporation invite tenders for the construction of tanks, percolating filters, and alterations to main outfall sewer, etc. Drawings, etc., may be seen, and quantities, and all other particulars obtained, on application at the office of Messrs. James Diggle & Son, civil engineers, 14, Victoria-street, Westminster, S.W., on payment of 2*l.* 2s.

DECEMBER 3.—**Loughton.**—BACTERIAL FILTER.—The U.D.C. invite tenders for the erection of a continuous bacterial filter at the sewage works. Plans, etc., and all further information required can be obtained from Mr. Horace White, the Council's Surveyor, upon deposit of 1*l.* for plans, etc.

DECEMBER 5.—**Wembley.**—MAKING-UP.—The U.D.C. invite tenders for the making-up of Clayton-avenue and Westbury-road, Wembley. Drawings, etc., may be seen at the office of Mr. Cecil R. W. Chapman, the Surveyor to the Council, at the Public Offices, and quantities, with form, at office of Mr. Fredk. W. Rodd, Clerk to the Council.

DECEMBER 6.—**Aldershot.**—PRIVATE STREET WORKS.—The Council invite tenders for the making-up of Staff Hotel-road. Plans, etc., may be seen, and quantities obtained, on application at the office of

ROADS, etc.—*continued.*

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in.

Mr. Fred C. Uren, M.Inst.C.E., the Surveyor to the Council, Municipal Buildings, Aldershot.

DECEMBER 6. — **Warblington.** — SEWERS. — The U.D.C. invite tenders for laying cast-iron and stoneware pipe sewers, together with the construction of manholes, etc., in connexion with the main sewerage and sewage disposal scheme (contract No. 1). Drawings may be inspected, and specifications, etc., obtained, on deposit of 4*l.* 4s., at the office of the Engineer, Mr. Ernest Bennett, of 47, Victoria-street, Westminster, S.W.

STONES, MATERIAL, AND STORES.

NOVEMBER 21.—**Hull.**—STORES AND CARTAGE.—The Corporation invite tenders for cartage and stores. Forms of tender and other particulars may be obtained at the office of Mr. A. E. White, M.Inst.C.E., City Engineer, Town Hall, Hull.

NOVEMBER 22.—**Sidmouth.**—GRANITE.—The U.D.C. invite tenders for the supply of about 1,000 tons of 2-in. granite and about 100 tons of ¾-in. Mr. Richard Lake, Surveyor.

NOVEMBER 23. — **Handsworth.**—MATERIALS.—The U.D.C. invite tenders for supplying macadam stone, kerbs, bricks, drain pipes, etc. Conditions, etc., may be seen, and forms obtained, on application to Mr. H. Richardson, A.M.Inst.C.E., Surveyor to the Council.

NOVEMBER 23.—**London.**—STORES.—The Directors of the Great Northern Railway Company invite tenders for the supply of stores. A list of the contracts and forms may be obtained upon application to Mr. Weeks, the Stores Superintendent, Doncaster, by whom every information will be furnished.

NOVEMBER 23.—**Newcastle-on-Tyne.**—STORES.—The Tyne Improvement Commissioners invite alternative tenders for the supply of stores. Forms of tender may be obtained on application at the offices of the Commissioners' Engineer, Bewick-street, Newcastle-on-Tyne.

NOVEMBER 26. — **Clifton, York.** — STORES. — For supplying stores to the North Riding of Yorkshire Asylum. Forms of tender may be had on application to Mr. H. H. Dryland, Clerk and Steward, North Riding Asylum, Clifton, York.

NOVEMBER 28.—**Manchester.**—STORES.—Rochdale Canal Company invite tenders for the supply of stores. Samples can be seen, and approximate quantities ascertained, on application at the company's stores, 80, Dale-street, Manchester, between 10 a.m. and 4 p.m., on the 22nd and 23rd inst.

NOVEMBER 30. — **Birmingham.** — MAIN ROAD MATERIAL.—Warwickshire C.C. invite tenders for the supply of road material, delivered at the various railway stations and wharves in the county. Forms to be obtained from Mr. John Willmot, County Surveyor, 6, Waterloo-street, Birmingham.

DECEMBER 1.—**Dublin.**—STORES.—The Directors of the City of Dublin Steam Packet Company invite tenders for the supply of iron castings, paints, timber, etc. Specifications can be seen at the company's office, 9, Regent-road, Liverpool.

DECEMBER 3.—**Ipswich, Halesworth, and Eye.**—ROAD MATERIALS.—The East Suffolk C.C. invite tenders from actual quarry owners for the supply of road materials. Specifications, etc., can be obtained on application to the Chief Surveyor of Main Roads, County Hall, Ipswich.

DECEMBER 10.—**Trimdon Grange, Co. Durham.**—MATERIALS.—For the supply of iron, steel, metal and brass castings, bricks, etc. Forms of tender and specifications may be obtained from the Storekeeper, Trimdon Grange Colliery.

DECEMBER 14.—**Maidstone.**—BROKEN ROAD STONE AND TARRED MACADAM.—The Bridges and Roads Committee of the Kent C.C. invite tenders for the supply of broken road stone and for tarred macadam. Specification, etc., can be obtained upon application to the County Surveyor, Maidstone.

NO DATE.—**Bracebridge, Lincs.**—STORES.—The Visitors of the Asylum invite tenders for the supply of earthenware, timber, etc. Tender forms and further particulars to be had from Mr. E. George, Clerk of the Asylum, Bracebridge Heath.

Public Appointments.

Nature of Appointment.	By whom Advertised.	Salary.	Application to be in
*ASSISTANT VISITING TEACHER OF LAND SURVEYING	L.C.C.	See advertisement in this issue	Nov. 26
*INSP. OF NUISANCES, SURV. & COLLECTOR OF RATES	Nailsworth U.D.C.	90*l.* per annum	Nov. 29
*SURVEYOR OF HIGHWAYS	Easthampstead R.D.C.	See advertisement in this issue	No date.

Auction Sales.

Nature and Place of Sale.	By whom Offered.	Date of Sale.
*PLT., PROP., ETC., OF BLDRS. & CONTRS. AT CANDLESBY—At the Windmill Hotel, Alford	Dickinson, Riggall, & Davy	Nov. 22
*FREEHOLD INVESTS. OR BLDG. SITES, FITZROY-SQ. & MARYLEBONE—At the Mart	Rutley, Son, & Vine	Nov. 28
*DEALS, BATTENS, BOARDS, TIMBER, ETC.—Great Hall, Winchester House, E.C.	Churchill & Sim	Nov. 30
*FREEHOLD BUILDING SITE, CITY OF LONDON—At the Mart	Etwin Fox, Bousfield, Burnetts, & Baddeley	Dec. 7
*FREEHOLD BUILDING LAND, SURREY—At the Mart	Weatherall & Green	Dec. 14

SOME RECENT SALES OF PROPERTY:

ESTATE EXCHANGE REPORT.

November 2.—By KEMSLEY (at Romford).
Romford.—65 and 67, Victoria-rd. (s.), f., p. .. £620
November 3.—By WALLER & KING (at Southampton).
Southampton.—Suffolk-av., f.g. rents 354*l.* 7,926
By KEMSLEY (at Buckhurst-hill).
Buckhurst-hill.—Queen's-rd., Dunbeath House, f., p. 480
November 4.—By MADDISON, MILES, & MADDISON (at Beccles).
Aldeby, Norfolk.—The Paddock and 8 a. 2 r. 5 p., f. 415
November 5.—By CUMBERLAND, BROWNSON, & PAGE (at Ashbourne).
Yeaveley, Derby.—Booth Hay Farm, 171 a. 2 r. 3 p., f. 5,100
November 7.—By WILKINSON, SON, & WELCH (at Brighton).
Brighton.—2, 3, 4, and 5, North-quadrant (s.), f., y.r. 164*l.* 10s. 1,775
96, Queen's-rd. (s.), f., y.r. 60*l.* 910
Hove.—39 to 42, Waterloo-st. (s.), f., y.r. 203*l.* 2,010
12, Cross-st. (s.), f., y.r. 30*l.* 410
By KEMSLEY.
Woodford.—Firtree-cottages, f.g. rents 30*l.*, reversion in 91 yrs. 630
November 8.—By DEBENHAM, TEWSON, RICHARDSON, & CO.
Blackheath.—13, Shooter's Hill-rd., f., p. 403
By JOSEPH HIBBARD & SONS.
Stoke Newington.—Cowper-rd., f.g. rents 8*l.*, reversion in 39 yrs. 200
By ALFRED SAVILL & SONS (at Dunmow).
Dunmow, Essex.—Enclosures of meadow land, 20 a. 0 r. 30 p., f. 3,152
November 10.—By C. C. & T. MOORE.
Camberwell.—Warrior-rd., f.g. rents 41*l.* 5s., reversion in 34¼ yrs. 935
Mile End.—25, Coventry-st., f., w.r. 23*l.* 8s. ... 245
Limehouse.—4, Rhodeswell-rd. (s.), f., w.r. 26*l.* . 100
By GEO. PEARCE & SONS.
Hackney.—38 to 44 (even), Weymouth-ter., f., w.r. 218*l.* 8s. 820
Haggerston.—25, Dove-row, f., w.r. 42*l.* 18s. .. 160
By NEWSON & SHEPHARDS.
Canonbury.—45, St. Paul's-rd., u.t. 25 yrs., g.r. 5*l.*, p. 210
Islington.—107, Pembroke-st. (s.), u.t. 39 yrs., g.r. 7*l.*, y.r. 60*l.* 275
121, Downham-rd., u.t. 62 yrs., g.r. 12*l.* 15s., y.r. 40*l.* 295
Edmonton.—12 to 20 (even), King's-rd., f., w.r. 97*l.* 10s. 903
By H. J. BLISS & SONS.
Buckhurst Hill.—Alfred-rd., Hope Cottage, f., w.r. 20*l.*, 6s. 210
Poplar.—324, High-st. (s.), f., y.r. 35*l.* 850
By STIMSON & SONS.
Paddington.—14, 15, and 16 Albert-st., u.t. 41 yrs., g.r. 19*l.* 10s., w.r. 163*l.* 16s. 590
73, Harrow-rd. (s.) u.t. 41 yrs., g.r. 15*l.*, y.r. 75*l.* 325
Bayswater.—140, Queen's-rd., u.t. 27½ yrs., g.r. 7*l.* 10s., y.r. 80*l.* £500
Camden Town.—9, Wilmot-pl., u.t. 32½ yrs., g.r. nil, y.r. 50*l.* 440
Stoke Newington.—50, Clissold-rd., u.t. 37½ yrs., g.r. 7*l.*, y.r. 50*l.* 275
Plaistow.—19, Cecil-rd., f., y.r. 28*l.* 410
Brixton.—81, Leander-rd., u.t. 79 yrs., g.r. 7*l.*, o.r. 38*l.* 310
Deptford.—40 and 42, Watergate-st., f., w.r. 46*l.* 16s. 210
November 11.—By KNIGHT, FRANK, & RUTLEY.
Paddington.—45, Cambridge-st., u.t. 13 yrs., g.r. 9*l.* 9s., y.r. 85*l.* 800
Kensington.—7, 8, and 9, Courtland-ter., u.t. 42 yrs., g.r. 30*l.*, y.r. 260*l.* 2,500
By MULLETT, BOOKER, & CO.
Portman-square.—19, Portman-st., u.t. 52 yrs., g.r. 90*l.*, p. 2,500
By WALLEN & CLUNN.
Tooting.—24 and 26, Selkirk-rd., u.t. 68 yrs., g.r. 11*l.*, w.r. 54*l.* 12s. 300

Contractions used in these lists.—F.g.r. for freehold ground-rent; l.g.r. for leasehold ground-rent; i.g.r. for improved ground-rent; g.r. for ground-rent; r. for rent; f. for freehold; c. for copyhold; l. for leasehold; p. for possession; e.r. for estimated rental; w.r. for weekly rental; q.r. for quarterly rental; y.r. for yearly rental; u.t. for unexpired term; p.a. for per annum; yrs. for years; la. for lane; st. for street; rd. for road; sq. for square; pl. for place; ter. for terrace; cres. for crescent; av. for avenue; gdns. for gardens; yd. for yard; gr. for grove; b.h. for beerhouse; p.h. for public-house; o. for offices; s. for shops; ct. for court.

PRICES CURRENT OF MATERIALS.

*** Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

BRICKS, &c.

Per 1000 Alongside, in River.

	£ s. d.
Best Stocks	1 12 0
Picked Stocks for Facings	2 10 0

Per 1000, Delivered at Railway Depôt.

	£ s. d.		£ s. d.
Flettons	1 8 0	Quoins, Bullnose, and Flats	14 7 6
Best Fareham Red	3 12 0	D'ble Stretchers	16 7 6
Best Red Pressed Buabon Facing	5 0 0	Double Headers	13 7 6
Best Blue Pressed Staffordshire	3 15 0	One Side and two Ends	17 7 6
Do. Bullnose	4 0 0	Two Sides and one End	18 7 6
Best Stourbridge Fire Bricks	3 14 0	Splays & Squints	15 17 6
GLAZED BRICKS.		Best Dipped Salt Glzd. Str'tch'rs	10 17 6
Best White and Ivory Glazed Stretchers	10 17 6	Headers	10 7 6
Headers	10 7 6	Quoins, Bullnose, and Flats	14 7 6
		D'ble Stretchers	16 7 6

BRICKS, &c. (*continued*).

Per 1000, Delivered at Railway Depôt.

	£ s. d.		£ s. d.
GLAZED BRICKS (*continued*)—			
Double Headers	13 7 6	Two Sides and one End	18 7 6
One Side and two Ends	17 7 6	Splays & Squints	15 17 6
Second Quality White and Dipped Salt Glazed, per 1000 less than best.			4

	s. d.	
Thames and Pit Sand	6	6 per yard delivered
Thames Ballast	5	0 ,, ,,
Best Portland Cement	26	0 per ton, ,,
Best Ground Blue Lias Lime	19	0 ,, ,,

NOTE.—The cement or lime is exclusive of the ordinary charge for sacks.

Grey Stone Lime	11s. 6d. per yard, delivered
Stourbridge Fireclay in sacks 27s. 0d. per ton at rly. d	

STONE.

Per Ft. Cube.

	s.
BATH STONE—delivered on road waggons, Paddington Depôt	1
Do. do. delivered on road waggons, Nine Elms Depôt	1

PORTLAND STONE (20 ft. average)—

Brown Whitbed, delivered on road waggons, Paddington Depôt, Nine Elms Depôt, or Pimlico Wharf	2
White Basebed, delivered on road waggons, Paddington Depôt, Nine Elms Depôt, or Pimlico Wharf	2

Per Ft. Cube, Delivered at Railway Depôt.

	s. d.		s.
Ancaster in blocks	1 10	Bed Corsehill in blocks	2
Beer in blocks	1 6		
Greenshill in blocks	1 10	Closeburn Bed Freestone	2
Darley Dale in blocks	2 4	Bed Mansfield Freestone	2

YORK STONE—*Robin Hood Quality.*

Per Ft. Cube, Delivered at Railway Depôt.

Scappled random blocks	2

Per Ft. Super., Delivered at Railway Depôt.

6 in. sawn two sides landings to sizes (under 40 ft. super.)	2
6 in. rubbed two sides ditto, ditto	0
3 in. sawn two sides slabs (random sizes)	0
2 in. to 2½ in. sawn one side slabs (random sizes)	0
1½ in. to 2 in. ditto, ditto	0

HARD YORK—

Per Ft. Cube, Delivered at Railway Depôt.

Scappled random blocks	3

Per Ft. Super., Delivered at Railway Depôt.

6 in. sawn two sides landings to sizes (under 40 ft. super.)	2
6 in. rubbed two sides ditto	3
3 in. sawn two sides slabs (random sizes)	1
2 in. self-faced random flags	0

SLATES.

Per 1000 of 1200 at Railway Depôt.

In. In.	£ s. d.	In. In.	£ s.
20×10 best blue Bangor	13 2 6	20×10 1st quality ditto	13 0
20×12 ditto	13 17 6	20×12 ditto	13 15

SLATES (continued).

Per 1000 of 1200 at Railway Depôt.

In. In.	£ s. d.	In. In.	£ s. d.
16×8 ditto.....	7 5 0	18×10 ditto	13 5 0
22×10 best blue Portmadoc ...	12 12 6	16×8 ditto	10 5 0
16×8 ditto	6 12 6	20×10 permanent green	11 12 6
20×10 best Eur'ka unfading green	15 17 6	18×10 ditto	9 12 6
20×12 ditto	18 7 6	16×8 ditto.....	6 12 6

TILES.

At Railway Depôt.

	s. d.		s. d.
Best plain red roofing (per 1000)	42 0	Best "Hartshill" brand, plain sandfaced (per 1000)...	50 0
Hip and Valley (per doz.) ...	3 7	Do. pressed (per 1000)	47 6
Best Broseley (per 1000)	50 0	Do. Ornamental (per 1000)	50 0
Do. Ornamental (per 1000)	52 6	Hip (per doz.)...	4 0
Hip and Valley (per doz.).....	4 0	Valley (per doz.)	3 6
Best Buabon red, brown, or bridled (Edw'ds) (per 1000)	57 6	Staffords. (Hanley) Reds or Brindled (per 1000)	42 6
Do. Ornamental (per 1000)	60 0	Hand-made sandfaced (per 1000)	45 0
Hip (per doz.)...	4 0	Hip (per doz.)...	4 0
Valley (per doz.)	3 0	Valley (per doz.)	3 6

WOOD.

Building Wood.	At per standard. £ s. d.	£ s. d.
Deals: best 3 in. by 11 in. and 4 in. by 9 in. and 11 in.....	14 0 0 ...	15 10 0
Deals: best 3 by 9	13 10 0 ...	14 10 0
Battens: best 2½ in. by 7 in. and 8 in., and 3 in. by 7 in. and 8 in.	11 10 0 ...	12 10 0
Battens: best 2½ by 6 and 3 by 6...	0 10 0 ...	less than 7 in. and 8 in.
Deals: seconds.....	1 0 0	less than best.
Battens: seconds.....	0 10 0 ...	,,
2 in. by 4 in. and 2 in. by 6 in....	9 10 0 ...	10 10 0
2 in. by 4½ in. and 2 in. by 5 in...	9 0 0 ...	10 0 0
Foreign Sawn Boards— 1 in. and 1½ in. by 7 in.	0 10 0	more than battens.
¾ in.	1 0 0	,,
Fir timber: best middling Dantzig or Memel (average specification)	At per load of 50 ft. 5 0 0 ...	5 10 0
Seconds	4 10 0 ...	5 0 0
Small timber (8 in. to 10 in.) ...	3 17 6 ...	4 0 0
Small timber (6 in. to 8 in.).....	3 5 0 ...	3 10 0
Swedish balks	2 12 6 ...	3 0 0
Pitch-pine timber (30 ft. average.)	4 10 0 ...	5 5 0

Joiners' Wood.	At per standard. £ s. d.	£ s. d.
White Sea: first yellow deals, 3 in. by 11 in.....	24 10 0 ...	25 10 0
3 in. by 9 in.	22 10 0 ...	23 10 0
Battens, 2½ in. and 3 in. by 7 in.	17 0 0 ...	18 0 0
Second yellow deals, 3 in. by 11 in.	19 0 0 ...	20 0 0
,, ,, 3 in. by 9 in.	18 0 0 ...	19 10 0
Battens, 2½ in. and 3 in. by 7 in.	14 0 0 ...	15 0 0
Third yellow deals, 3 in. by 11 in. and 9 in.	14 0 0 ...	15 0 0
Battens, 2½ in. and 3 in. by 7 in.	1 10 0 ...	12 10 0
Petersburg: first yellow deals, 3 in. by 11 in.....	21 10 0 ...	22 10 0
Do. 3 in. by 9 in.	18 10 0 ...	19 10 0
Battens	14 0 0 ...	15 0 0
Second yellow deals, 3 in. by 11 in.	16 10 0 ...	17 10 0
Do. 3 in. by 9 in.	15 0 0 ...	16 0 0
Battens	11 10 0 ...	12 10 0
Third yellow deals, 3 in. by 11 in.	13 10 0 ...	14 10 0
Do. 3 in. by 9 in.....	13 0 0 ...	14 0 0
Battens	10 10 0 ...	11 0 0
White Sea and Petersburg— First white deals, 3 in. by 11 in.	15 0 0 ...	16 0 0
,, ,, 3 in. by 9 in.	14 0 0 ...	14 10 0
Battens.....	11 10 0 ...	12 10 0
Second white deals, 3 in. by 11 in.	14 0 0 ...	15 0 0
,, ,, 3 in. by 9 in.	13 0 0 ...	14 0 0
Battens	10 10 0 ...	11 0 0
Pitch-pine: deals.....	19 0 0 ...	21 0 0
Under 3 in. thick extra	0 10 0 ...	1 0 0
Yellow pine—First, regular sizes	44 0 0	upwards.
Oddments	32 0 0	,,
Seconds, regular sizes	33 0 0	,,
Oddments	28 0 0	,,
Kauri Pine—Planks, per ft. cube..	0 3 6 ...	0 5 0
Dantzig and Stettin Oak Logs— Large, per ft. cube	0 3 0 ...	0 3 9
Small ,, ,, ...	0 2 6 ...	0 2 6
Wainscot Oak Logs, per ft. cube..	0 5 6 ...	0 6 0
Dry Wainscot Oak, per ft. sup. as inch	0 0 8½ ...	0 0 9½
¾ in. do. do	0 0 7 ...	—
Dry Mahogany—Honduras, Tabasco, per ft. super. as inch...	0 0 10 ...	0 1 1
Selected, Figury, per ft. super as inch	0 1 6 ...	0 2 6
Dry Walnut, American, per ft. super. as inch	0 0 10 ...	0 1 0
Teak, per load	18 0 0 ...	22 0 0
American Whitewood Planks, per ft. cube.....	0 4 0 ...	0 5 0

Prepared Flooring, etc.—	Per square.	
1 in. by 7 in. yellow, planed and shot	0 13 6 ...	0 17 0
1 in. by 7 in. yellow, planed and matched	0 14 0 ...	0 18 0
1¼ in. by 7 in. yellow, planed and matched	0 16 0 ...	1 0 0
1 in. by 7 in. white, planed and shot	0 12 0 ...	0 14 6
1 in. by 7 in. white, planed and matched	0 12 6 ...	0 15 0
1¼ in. by 7 in. white, planed and matched	0 15 0 ...	0 16 6
¾ in. by 7 in. yellow, matched and beaded or V-jointed brds.	0 11 0 ...	0 13
1 in. by 7 in. ,, ,,	0 14 0 ...	0 18 6
¾ in. by 7 in. white ,, ,,	0 10 0 ...	0 11 0
1 in. by 7 in. ,, ,,	0 12 9 ...	0 15 0

6 in. at 6d. to 9d. per square less than 7 in.

JOISTS, GIRDERS, &c.

	In London, or delivered Railway Vans, per ton. £ s. d.	£ s. d.
Rolled Steel Joists, ordinary sections	7 0 0 ...	7 10 0
Compound Girders, ordinary sections	9 0 0 ...	10 0 0
Steel Compound Stanchions	11 0 0 ...	12 0 0
Angles, Tees, and Channels, ordinary sections	9 0 0 ...	10 0 0
Flitch Plates	9 0 0 ...	9 10 0
Cast Iron Columns and Stanchions including ordinary patterns.....	7 10 0 ...	8 10 0

METALS.

	Per ton, in London. £ s. d.	£ s. d.
Iron— Common Bars	8 10 0 ...	9 0 0
Staffordshire Crown Bars, good merchant quality	8 15 0 ...	9 5 0
Staffordshire "Marked Bars" ...	10 10 0 ...	—
Mild Steel Bars	8 15 0 ...	9 5 0
Hoop Iron, basis price	9 5 0 ...	9 10 0
,, ,, Galvanised	17 0 0 ...	—
('And upwards, according to size and gauge.)		
Sheet Iron Black— Ordinary sizes to 20 g.	9 15 0 ...	—
,, ,, 24 g.	10 15 0 ...	
,, ,, 26 g.	12 5 0 ...	—
Sheet Iron, Galvanised, flat, ordinary quality— Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.....	15 0 0 ...	—
Ordinary sizes to 22 g. and 24 g.	15 10 0 ...	—
,, ,, 26 g.	16 10 0 ...	—
Sheet Iron, Galvanised, flat, best quality— Ordinary sizes to 20 g.	18 0 0 ...	—
,, ,, 22 g. and 24 g.	18 10 0 ...	—
,, ,, 26 g.	20 0 0 ...	—
Galvanised Corrugated Sheets— Ordinary sizes, 6 ft. to 8 ft. 20 g.	14 10 0 ...	—
,, ,, 22 g. and 24 g.	14 15 0 ...	—
,, ,, 26 g.	16 5 0 ...	—
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	12 0 0 ...	—
Best Soft Steel Sheets, 2 g. & 24 g.	13 0 0 ...	—
,, ,, ,, 26 g.	15 0 0 ...	—
Cut Nails, 3 in. to 6 in.	10 10 0 ...	11 0 0
(Under 3 in., usual trade extras.)		

	Per ton, in London. £ s. d.	£ s. d.
Lead—Sheet, English, 4lb. and up.	16 12 6 ...	—
Pipe in coils	17 2 6 ...	—
Soil pipe	20 2 6 ...	—
Compo pipe.....	20 2 6 ...	—
Zinc—Sheet—	In casks of 10 cwt.	
Vielle Montagne	30 10 0 ...	—
Silesian.....	30 0 0 ...	—
Zinc, in bundles, 1s. per cwt. extra.		
Copper— Strong Sheet.....per lb.	0 1 0 ...	—
Thin ,, ... ,,	0 1 1 ...	—
Copper nails ..... ,,	0 0 10 ...	—
Copper wire ..... ,,	0 0 10 ...	—
Brass— Strong Sheet..... ,,	0 0 11 ...	—
Thin..... ,,	0 1 0 ...	—
Tin—English Ingots ..... ,,	0 1 7 ...	—
Solder—Plumbers' ..... ,,	0 0 7½ ...	—
Tinmen's ..... ,,	0 0 9½ ...	—
Blowpipe ..... ,,	0 1 1 ...	—

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

Per Ft., Delivered.

15 oz. thirds	2½d.	26 oz. fourths	3d.
,, fourths	1½d.	32 oz. thirds	5d.
21 oz. thirds	3d.	,, fourths	4½d.
,, fourths	2½d.	Fluted Sheet, 15 oz.	3½d.
23 oz. thirds	4d.	,, 21 oz.	4½d.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

Per Ft., Delivered.

⅛ Hartley's	2d.	Figured, Oxford Rolled, & 'Oceanic' Glass, white	3½d.
¼ ,, ...	2½d.	Ditto, tinted.....	5d.
⅜ ,, ...	2¾d.		

OILS, &c.

		£ s. d.
Raw Linseed Oil in pipes	per gallon	0 3 11
,, ,, ,, in barrels	,,	0 4 0
,, ,, ,, in drums	,,	0 4 2
Boiled ,, ,, in barrels	,,	0 4 2
,, ,, ,, in drums	,,	0 4 5
Turpentine in barrels	,,	0 4 7
,, in drums	,,	0 4 9
Genuine Ground English White Lead	per ton	21 0 0
Red Lead, Dry	,,	20 0 0
Best Linseed Oil Putty	per cwt.	0 10 6
Stockholm Tar	per barrel	1 12 0

VARNISHES, &c.

	Per gallon. £ s. d.
Fine Pale Oak Varnish	0 8 0
Pale Copal Oak	0 10 6
Superfine Pale Elastic Oak	0 12 6
Fine Extra Hard Church Oak.....	0 10 0
Superfine Hard-drying Oak, for seats of Churches.....	0 14 6
Fine Elastic Carriage	0 12 0
Superfine Pale Elastic Carriage	0 16 0
Fine Pale Maple	0 10 0
Finest Pale Durable Copal	0 12 0
Extra Pale French Oil	1 1 0
Eggshell Plating Varnish	0 12 0
White Pale Enamel	1 4 0
Extra Pale Paper	0 12 0
Best Japan Gold Size.....	0 10 6
Best Black Japan	0 16 0
Oak and Mahogany Stain.....	0 9 0
Brunswick Black	0 8 0
Berlin Black	0 16 0
Knotting	0 10 9
French and Brush Polish.....	0 10 6

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach us *not later than* 10 *a.m. on Thursday.* [N.B.—We cannot publish Tenders unless authenticated either by the architect or the building owner; and we cannot publish announcements of Tenders accepted unless the amount of the Tender is stated, nor any list in which the lowest Tender is under 100*l.* unless in some exceptional cases and for special reasons.]

* Denotes *accepted.* † Denotes *provisionally accepted.*

BROADSTAIRS.—For new business premises High-street, Broadstairs. Mr. H. Bertram Langham, architect, Bank-chambers, Broadstairs:—

W. W. Martin	£2 736	R. Elliott & Co., Margate*	£2,000
J. T. May	2,670		
S. W. Stiff	2,149		

CAERPHILLY. — For rebuilding the "Blue Bell Hotel," Caerphilly, for Mr. Josiah Morgan. Mr. Sidney Williams, architect, Wharton-street, Cardiff:—

T. F. Howells..... £4,850

CARK-IN-CARTMEL.—For erecting six semi-detached villas, for Mr. W. Wilson. Messrs. J. W. Grundy & Son, architects and surveyors. Quantities by Mr. S. Grundy, jun., Ulverston:—

R. Shuttleworth	£849 16 2½	J. Gaskarth ..	£777 11 4
J. Neal	847 1 0	E. Dickenson	777 5 6
M. W. Birch..	841 0 0	Simpson & Armer	776 19 9
J. H. Keith ..	840 19 1½	Chippendale, jun.	775 9 3½
B. Ward	821 19 0	A. O. Thoms	775 6 3
N. Wearing ..	810 5 7	H. Burrell....	774 18 1
R. Hutton ..	806 8 7½	J. W. Braithwaite	769 9 11
D. Jones	778 16 6	W. Parkinson, Lancaster*..	769 0 9½
J. Clayton, jun.	777 16 6		

The tenders are made up, in case of sub-tenders, with the lowest separate tenders added, thus showing totals.

[Architect's estimate, £757 19s. 8d.]

DEPTFORD.—For (1) Construction of flooring over the first-class swimming bath at Laurie-grove, New Cross; (2) alterations to building, for the Borough Council. Mr. J. Sutcliffe, A.M.Inst.C.E., Borough Surveyor:—

Construction of Flooring at Baths, Laurie-grove.

H. H. Hollingsworth, 43, Jerningham-road, New Cross £177

Alterations to Baths, Laurie-grove.

S. J. Collins, 46, Killyon-road, Clapham .. £210

EARLSWOOD.—For additions to the administrative block of the Isolation Hospital, for the Reigate Rural District Council. Mr. T. W. Parrish, architect, Horley:—

H. Freeman, Ltd.	£466 12	C. Nightingale & Sons	£394 0
T. C. Gorham ..	465 0	R. E. Mitchell ..	345 0
E. Worssell	398 10	W. Laker, Horley*	286 15

GRAYS (Essex).—For repairs and painting work to the shore buildings in connexion with the training ship "Exmouth," for the Metropolitan Asylums Board. Mr. W. T. Hatch, M.Inst.C.E., M.I.Mech.E., Engineer-in-Chief:—

J. Aslett	£255 18 6	B. E. Nightingale, Albert-embankment, S.E.* ..	£190 0 0
W. Hussey	235 0 0		
L. Kazak	234 0 0		
Vigor & Co.	194 0 0		

LLANDAFF. — For proposed servants' quarters, Howells, Glamorgan County Schools, Llandaff, for the Governors. Mr. G. E. Halliday, F.R.I.B.A., 19, Castle-street, Cardiff:—

J. Stevens	£1,149 0 0	E. Turner & Sons	£994 0 0
W. H. Evans..	1.141 0 0	Cox & Bardo, Cardiff*	969 19 3
S. Shail	1,100 0 0	R. W. Moon ..	897 0 0
Hatherly & Co.	1,057 0 0	D. Bryan	836 2 9
Davis & Sons..	1,050 0 0		

LOW VALLEYFIELD.—For the erection of a new police-station, for the County Council of Fife. Mr. David Henry, architect, Church-square, St. Andrews. Quantities by architect:—

Mason and Brickwork: A. Wilson, Cowdenbeath	£345	0 0
Joiner: W. King, Kincardine-on-Forth.....	156	5 8
Plumbers: A. Thomson & Co., Dunfermline ..	90	3 9
Plasterers: Lind Bros., Lochgelly	41	19 0
Slater: J. Robertson, Dunfermline.....	65	19 0
Heating: D. Keay, Dundee	33	9 0
Cell Doors, etc.: C. Smith, Sons, & Co., Birmingham	63	19 0

MAIDSTONE.—For new classroom and other works at the grammar school for girls, for the Governors. Messrs. Ruck & Smith, architects, Maidstone:—

J. Sellick & Son..	£2 470 18	W. T. Burrows ..	£1,986 0
Gray & Barney..	2,148 0	J. W. Ellingham..	1,967 0
Cox Bros.	2,090 0	J. A. Davison '..	1,964 0
H. Cruttenden & Son.....	2,085 0	G. E. Wallis & Sons, Ltd.	1,938 0
R. Corben & Co.	2,050 0	L. Seagar	1,879 0
G. Baker & Son..	2,045 0	Barden & Head, Maidstone†	1,860 0
Elmore & Son ..	1,995 0		

NORMANTON.—For erecting thirty-eight houses for working classes on a site abutting upon Han Hill Park, for the Urban District Council. Mr. Arthur Hartley, architect and surveyor:—

R. Leake & Sons, Normanton £6,825

[For the whole of the works.]

PENRHIWFER.—For laying stoneware pipe sewer, together with manholes, etc., for Llantrisant and Llantwit Vardue Rural District Council. Mr. Thomas Saunders, Surveyor, School-street, Pontyclun:—

Johnson Bros...	£289 0 0	J. Rutter.....	£255 6 8
W. Rees	272 15 6	G. L. Morgan ..	247 13 2
Barnes, Chaplin, & Co.	265 13 0	John & West, Llantrisant*..	234 9 5
H. T. Haimes..	257 17 10		

PEPPARD (Oxon).—For the erection of a house and outbuildings, for Mr. J. C. L. Morgan-Brown. Mr. J. Gordon Allen, A.R.I.B.A., architect, Dashmonden, Holmdale-road, West Hampstead, N.W.:—

A. G. Butler*..... £501

RUSHEY-GREEN.—For alterations and extension of Messrs. Holloway's premises, 150, Rushey-green. Messrs. Norfolk & Prior, architects, 4, Station-buildings, Catford Bridge:—

C. Walker	£138 16	G. Otley & Son....	£118 0
J. Watt	135 0	H. T. Bishop.....	107 0

ST. DAVID'S (Pem.).—For the construction of a galvanised corrugated steel and timber boat-house, timber approach, and reinforced and solid concrete lifeboat slipway at Porth 'Stinian, near St. David's, for the Committee of Management of the Royal National Lifeboat Institution. Mr. W. T. Douglass, M.Inst.C.E., Engineer and Architect to the Institution:—

Wm. Harbrow	£3 997 4 2
A. Thorne & Sons	3 960 15 0
E. R. Lester	3 531 0 0
The Exors. of I. Arundel, Bradford*	2 998 3 0
W. Brettell & Co.	‡395 16 0

‡ Incomplete.

STAINLAND.—For constructing (A) pipe sewers from Brooknoyd Mills to near Town Ing Mills, (B) from Old Bar House to Gosport Bridge, for the Urban District Council of Stainland-with-Old Lindley. Mr. J. H. Walker, Surveyor, Council Offices, Stainland:—

	A.	B.
Lindley & Kaye	£707 0 0	£215 4 9
J. Taylor	355 15 10	168 17 2
F. Dearnley	348 3 2	182 1 5
Wright, Bailey, & Stott	340 0 0	175 0 0
W. Jowett	337 17 8	169 11 2
R. Turner	331 0 0	150 0 0
J. W. Boothroyd	322 0 0	125 0 0
W. Waring & Sons	316 11 2	150 18 5
W. H. & B. Priestley	314 18 0	165 13 0
D. Brook	311 18 11	158 19 8
Bower Bros.	298 0 0	139 0 0
A. Graham & Sons	296 0 0	126 0 0
Drinkwater & Schofield	290 0 0	135 0 0
J. R. Edwards	288 0 0	149 0 0
E. W. Bedford	287 6 10	148 18 5½
Balmforth Bros.	285 10 0	156 15 0
B. Riley	278 0 0	122 0 0
S. N. & H. Skyes	273 0 0	129 10 0
R. Naylor & Son	262 3 2	117 14 6
Clarside & Whiteley	250 0 0	138 0 0
J. Bateman, Girlington, Bradford*	222 12 0	—
H. Smithson, Lindley, Huddersfield*	—	104 0 0

For both A and B.

C. Longbottom	£427 17 9
Bentley & Swift	414 7 6
T. S. Dodd	414 0 0

[Surveyor's estimate, £294 (A), £120 (B).]

TUNBRIDGE WELLS.—For the erection and completion of new premises adjoining Groombridge Station for Mr. George West. Mr. David N. Bake, surveyor, 16, Basinghall-street, Tunbridge Wells:—

Stanbridge & Son	£1,082 0 0	Parker	£750 0 0
Bingham	902 6 6	A. F. Cheeseman	739 0 0
Meades	832 15 8	A. Manktelow	733 17 0
Goodwin Bros.	827 15 0	H. Housego, Groombridge*	728 0 0
Sykes & Son‡	785 0 0		
K. C. Jarvis	774 12 6		

‡ Too late.

WAKEFIELD.—For the construction of Bamborough, Templar, and Portland streets at Agbrigg, for Messrs. Jessop, Noble, & Wildsmith. Messrs. Richardson, Son, & Bell, A.R.I.B.A., surveyors, Wakefield:—

J. Lockey, Wakefield*	£163 17 1

WAKEFIELD.—For the erection of new houses and shop at Agbrigg, for Mr. Wilfred Jessop. Messrs. Richardson, Son, & Bell, A.R.I.B.A., architects, Wakefield:—

Builder: W. H. Nicholson*	£3,154 7 6
Joiner: M. Lockwood & Sons, Ossett*	2,010 8 4
Slater: J. W. Illingworth*	414 0 0
Plumber: H. Gillott*	576 2 6
Plasterer: A. Wilkinson, Ossett*	480 17 10
Painter: H. H. North, Horbury*	104 18 11

WATERFOOT.—For erecting a secondary and technical school, for Bacup and Rawtenstall Joint Secondary School Committee. Mr. Henry Littler, County Architect, Preston. Quantities by County Architect:—

Clayton Bros., Poynton, Stockport*	£20,575

WOOLWICH.—For painting, etc., at the Public Library, High-street, Plumstead, for Borough Council. Mr. J. Rush Dixon, M.Inst.C.E., Borough Engineer:—

Watts & Hayter	£250 0 0	S. J. Collins	£106 0 0
H. E. Quinnell	158 10 0	B. E. Nightingale	102 14 9
J. Girdlestone	145 0 0	R. Woolaston & Co.	85 5 0
Finch & Co.	130 0 0	J. Hocking	84 15 0
Blow & Peters	129 6 6	F. W. Dainton	80 3 4
J. S. Fenn	128 10 0	J. Stoneley & Co.	73 6 6
W. Sutch	112 2 0	F. H. Lemon	68 5 0
G. Clutterbuck	110 0 0		
Borough Engineer, Woolwich*	110 0 0		

WHITLEY.—For constructing concrete retaining wall, etc., in connexion with the improvement of the sea banks, for the Whitley and Monkseaton Urban District Council. Mr. A. J. Rousell, A.M.Inst.C.E., Council's Surveyor:—

R. Fisher, North Shields	£375

WILLINGTON.—For levelling, paving, etc., Belle Vue and Hutton terraces and Chapel-street, for the Urban District Council. Mr. J. H. Gardner, Surveyor to the Council. Quantities by Surveyor:—

	Chapel-street,	Belle Vue and Hutton terraces,
J. W. Henderson	£399 0 0	£195 0 0
G. Armstrong	377 6 3	185 8 4
Walton Bros.	451 16 3	220 0 3
J. H. Armory, Willington	344 10 0	*148 0 0
G. A. Reevell, Stockton	*289 19 3	164 8 0
J. Carrick	342 0 0	160 11 6
W. Elliott	486 18 3	199 18 3
G. Pickering	373 10 0	183 16 6
Surveyor's estimate	350 0 0	150 0 0

WOOLWICH.—For supplying and fixing fanlight openers to certain windows at the Brook Fever Hospital, Shooter's-hill, for the Metropolitan Asylums Board. Mr. W. T. Hatch, M.Inst.C.E., M.Inst.Mech.E., Engineer-in-Chief:—

The "England" Works, Leeds	£228 0 0	Lockerbie & Wilkinson (Birmingham), Ltd., Tipton, Staffs*	£144 7 6
Vizor & Co.	215 0 0		
J. Oram & Son	151 4 0		

HAMMERSMITH.—For cleaning and painting, etc., at the Central and Passmore Edwards Libraries and College Park Reading Room, for the Borough Council. Mr. H. Mair, Borough Surveyor:—

—	Central Library.	Passmore Edwards Library.	College Park Reading Room	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
J. Boarder	—	46 9 0	—	—
H. King & Sons	109 15 0	77 12 6	32 2 10	174 10 6
Birch & Rance	66 9 8	75 18 0	31 17 0	168 13 8
W. R. & A. Hide	73 7 8	63 9 0	25 0 0	166 0 0
Sage & Co., Ltd.	85 0 0	56 0 0	24 2 6	161 15 0
K. Milan	68 7 6	79 5 0	25 12 6	160 2 6
W. Bensey	67 19 0	66 11 0	28 6 0	159 10 6
Taylor Bros.	75 14 6	55 14 0	24 10 0	155 14 6
Bruton Bros., Ltd.	76 16 6	54 8 0	24 7 0	146 19 6
Ferris Bros.	65 11 0	57 1 6	22 19 6	143 9 2
R. Thomas	54 17 8	65 12 0	24 10 0	137 13 6
F. & T. Johnson	65 8 6	47 15 0	28 10 9	137 9 0
Clutterbuck & Co.	53 13 3	55 5 0	25 6 0	136 13 6
A. Perton	51 10 0	59 17 6	21 14 0	136 7 8
J. J. Pink	72 2 5	42 11 3	22 13 3	134 12 11
C. Bastable	63 4 11	48 14 9	21 0 0	134 0 0
W. King & Son	51 0 0	62 0 0	24 10 0	133 6 0
R. Reynolds	50 0 0	58 16 0	23 14 0	127 5 0
Dellar Bros.	60 8 6	43 2 6	24 17 0	125 1 6
Best & Gapp	40 13 6	59 11 0	19 1 1	118 7 2
Thos. Bendon, Ltd.	58 11 4	40 14 9	20 5 6	116 3 6
W. H. Poole & Co.	54 6 6	40 11 6	18 12 0	113 7 11
Schofield & Co.	51 3 5	43 12 6	22 8 0	112 4 0
F. A. Dainton	47 15 0	42 6 0	19 10 0	111 15 0
F. Lemon	51 5 0	41 0 0	22 6 0	109 6 0
T. Brown & Son	50 10 0	36 10 0	19 14 6	109 4 6
J. Stoneley & Co.	50 3 0	39 7 0	18 7 0	105 16 3
Chudleigh Bros.	49 0 9	38 8 6	19 10 0	94 16 0
F. W. Staniland	44 1 0	31 5 0	15 8 0	85 14 9
Skeffington Bros.	37 19 4	32 7 5	18 10 0	85 5 0
S. T. Wright & Co.	40 10 0	26 5 0	16 18 0	83 3 0
J. G. Richards	34 6 11	32 18 0	15 8 6	79 17 0
C. F. Clayton, Hebron-road, Hammersmith*	33 15 0	30 13 6	—	—

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